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THE UNIVERSITY OF ALBERTA

# DESCRIPTIVE STUDIES OF SIX CHILDREN IN THEIR CLASSROOM CONTEXTS

by

© PETER RICHARD MOODY

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY

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EDMONTON, ALBERTA
FALL, 1980

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Descriptive Studies of Six Children in their Classroom Contexts submitted by Peter Richard Moody in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Elementary Education.

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# ABSTRACT

This study was one of six doctoral dissertations which derived from a combined approach to the study of teaching in elementary schools. The main purpose of this study was to examine and describe the school experience from the unique and individual perspectives of six elementary school pupils. The primary orientation of this study was to link with the larger investigation, thus taking advantage of the data and methodology generated by that investigation.

The sample for the combined study comprised six classes of pupils and their teachers. The classes were at the grades one, three, and six levels in each of two schools in one small urban community in Alberta. The total sample comprised 159 pupils and six teachers. For the purposes of this study, one pupil was randomly selected from each of the six classes to serve as the subject for micro-ethnographic case study.

After preliminary training and piloting in schools not forming part of the sample, and after one week of in-class familiarization in the sample classrooms, classroom process data were collected over a three-week period. Most process data were collected during language arts and mathematics lessons.

Teacher-pupil interactions were coded via the Expanded Brophy-Good Dyadic Interaction Classroom Observation System. Pupil classroom behaviours were coded according to the low inference Coping Analysis Schedule for Educational Settings. Teachers' classroom management, instructional, and interpersonal skills were measured using eight high inference rating scales. Also during this three-week

period, video-taped exerpts were made of tea[illegible]s instructing prepared lessons. Interviews designed to elicit teachers' pre-instructional plans, stimulated recall of lessons, and grouping of pupils during lessons were conducted in association with the video-taped lessons. All interviews were audio tape recorded and transcribed.

During the fourth through sixth weeks of the investigation, several instruments were used to gain measures of pupil aptitudes, achievements, attitudes, and sociometric class standings. Questionnaires which measured parent attitudes toward education, the extent of their formal education, and their perceptions of and expectations for their children were also obtained during this time. Pupil demographic, discipline, attendance, and school progress information was obtained from pupil cumulative records and school progress reports.

Teacher demographic information was obtained via self-reports. Measures of teacher attitudes toward teaching, personality, attitudes toward and expectations and perceptions of pupils, and beliefs were obtained using a combination of interviews and structured instruments. Throughout the period of the investigation, the investigators recorded daily anecdotal notes for each of the classrooms being investigated.

The data from all instruments and measures were collated and analysed in order to present a full description of classroom contexts. Where appropriate (e.g., measures of pupil intellectual attributes, academic achievements, and attitudes), the pupil data were collected and treated in order to present class means and standard deviations again, as descriptive evidence of classroom contexts.

In addition to the measures and procedures already described, each of the six pupils chosen for case study, was subjected to an intensive day-long study followed by a semi-structured information-gathering interview (which was audio tape recorded and transcribed). This intensive study included time samplings of narrative descriptions of the behaviour settings, maps tracing the movements of classroom inhabitants, and specimen descriptions of the case study pupil's behaviours. The reliability of the data was checked by processes of triangulation and corroboration. They were presented anecdotally, and through the use of tables and figures.

The study resulted in several findings which relate specifically to the individual cases studied. The following general conclusions were drawn, however:

1. Each child is unique and should be treated as such.

2. Any child can be of compelling interest when subjected to intensive study.

3. Children, even at the grade one level, recognise school as playing an important and significant part in their lives.

4. Many classrooms do not yet function to meet many of the important needs of children.

The model depicting a behavioural cycle between teacher input and learner output posited by Braun (1976) was found to be useful as a basis for explicating important factors in the classroom experiences of the case study children.

# ACKNOWLEDGEMENT

This dissertation was made possible only through the cooperation and assistance of many people. It is my pleasure and privilege to thank and admit to a debt of gratitude to the following:

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## Chapter I

# INTRODUCTION AND PURPOSE OF THE STUDY

### Introduction

> At some point in time the collective results from numerous investigators studying individual students in the classroom may make it possible to elaborate more fully the type of interaction milieus that facilitate the growth of students varying in age, sex, socioeconomic status, aptitude, and personal traits. It seems that future investigations focused on individual student's behaviour will greatly expand our knowledge of classroom behaviour and learning. (Good and Brophy, 1974:326)

A major criticism of research on teaching is that far too much emphasis has been placed on studies which have failed to look inside classrooms (Dunkin and Biddle, 1974:13). This is to say that if the focus of educational research is teaching and learning in classrooms, then the subjects of the research should be regular teachers and their students in their own classroom settings, with teachers teaching typical curriculum materials as part of the regular school timetable. The type of research which best answers this need is probably naturalistic observation, that is, the examination of events as they occur *in situ*.

In common with most research endeavours, the study of teaching is concerned with generalizations. If an empirically based science of teaching is to be developed, then nomothetic research is necessary (i.e., large scale studies designed to obtain findings generalizable to most teaching situations). There are, however, inherent dangers in this approach to research in the social sciences. First, by seeking for generalizations or norms, it is possible to arrive at a representative picture of something which does not exist in reality. For this reason alone, nomothetic studies must be complemented with idiographic research (i.e., small scale, in-depth studies which attempt to particularize and make real at least some of the individual cases hidden in the sample of subjects who have been studied) (Allport, 1962).

Second, if teacher effectiveness is to be an important topic in the study of teaching, then pupils, as the target of teacher behaviours, must also be studied (Good and Brophy, 1973:51; Brophy and Good, 1974:vi). It is presumed that, if teachers are effective, then some pupil behaviours at least will result from teacher acts. But although many studies have investigated various aspects of pupil attributes, behaviours, and outcomes in order to relate them to teacher acts (Borich, 1977; Brophy and Good, 1974; Dunkin and Biddle, 1974; Hoge and Luce, 1979), few studies have examined individual pupils in detail to determine what the school experience is like from the pupil's perspective (King, 1979). Brandt (1972:286) noted that:

> The wide range of individual differences and the multiplicity of interacting factors in the school setting suggest a great need for idiographic studies. The latter are virtually non-existent in schools today.

Allport (1937:100) stated the argument for the study of the individual case even more strongly when he claimed that:

> If it were possible to grasp the complex totalities within a single individual life, to understand their formation, reciprocal action, directional tendencies and dynamics—even though the study should have no wider application—it would be an achievement quite as significant as the establishment of any common law.

The demands made on time and human resources usually drastically limit the number of subjects it is possible to study when conducting case studies involving much qualitative data. In such studies the emphasis is properly on the accuracy and completeness of the data. As noted by MacKay and Osoba (1978), "The recommendation coming from research methodologists is that one should use a variety of data collection devices that will compensate one another and provide a more complete picture of what is actually happening." Also, through the use of a variety of data collection devices that focus on a single topic, the principle of "triangulation" may be applied in order to crosscheck the data for accuracy.

None of the above statements is to deny the importance of large sample studies, but the argument for complementarity is maintained—particularly so when it is feasible to combine the collection of qualitative data with quantitative data (Campbell, 1974) in the same research project.

## Purpose of the Study

The primary purpose of this study was to examine school experience from the unique and individual perspectives of six pupils. The primary orientation of this study is that of a pilot work, linking with a larger study, and breaking ground both conceptually and methodologically in the nature of its attack on a complex problem.

## Research Questions

In studying the school experience from the perspectives of six individual pupils, a large number of pupil, teacher, and setting characteristics were taken into account. In seeking to describe and account for school experience for the six subject pupils, data were grouped and organized to answer the following questions:

1. What were the natures of the community and the two school settings for this study?
2. What were the physical and ambient characteristics of the six classrooms involved in this study?
3. For each of the six teachers in this study, what were the effects of his/her personality, beliefs, and classroom behaviours on the school experience of his/her pupils?
4. For each of the six subject pupils in this study:
    a. what was the influence of the home, and what attitudes did each one hold toward school?
    b. what was the social setting within his/her class?
    c. what were his/her academic attributes, abilities, and achievements?
    d. what was the nature of his/her classroom behaviours?
    e. what were the salient factors which appeared to have the greatest influence on his/her school experience?

## Significance of the Study

Following Clifford's (1973) plea for investigation based on continuity and unity of efforts, this study was devised as part of a larger, group study involving six doctoral students, all sharing the same thesis advisor (Eggert, Fasano, Mahen, Marland, Moody, and Muttart, 1976). The larger study comprised six separate studies which ranged fully across the Dunkin and Biddle (1974) model for the study of teaching (Figure 1). Using a common data base which had been collected by the authors, each of the other studies focused on one of the following topics:

1. The relationships between on the one hand, teacher classroom behaviour and, on the other hand, teacher expectations for individual pupil performance, and teacher personality, beliefs, attitudes, and role perception (Muttart, 1977).

2. The interactive thought processes of teachers in classroom instruction contexts (Marland, 1977).

3. The relationships between the styles of pupil behaviours and grade level, sex, socio-economic status, intelligence, academic achievement, attitudes, work skills and participation in group tasks of pupils (Mahen, 1977).

4. The relationships among the formative experiences of pupils, the personal properties of pupils, the classroom behaviours of pupils, and the classroom interactions between teacher and pupils (Fasano, 1977).

5. The relationships between teacher behaviours and pupil behaviours, achievement, and attitudes (Eggert, 1977).

Three of the studies briefly described above obviously used comparatively large groupings of pupils as the data base for investigation. The remaining studies focused on six teachers. It was decided that this study should focus on a small number of pupils (one

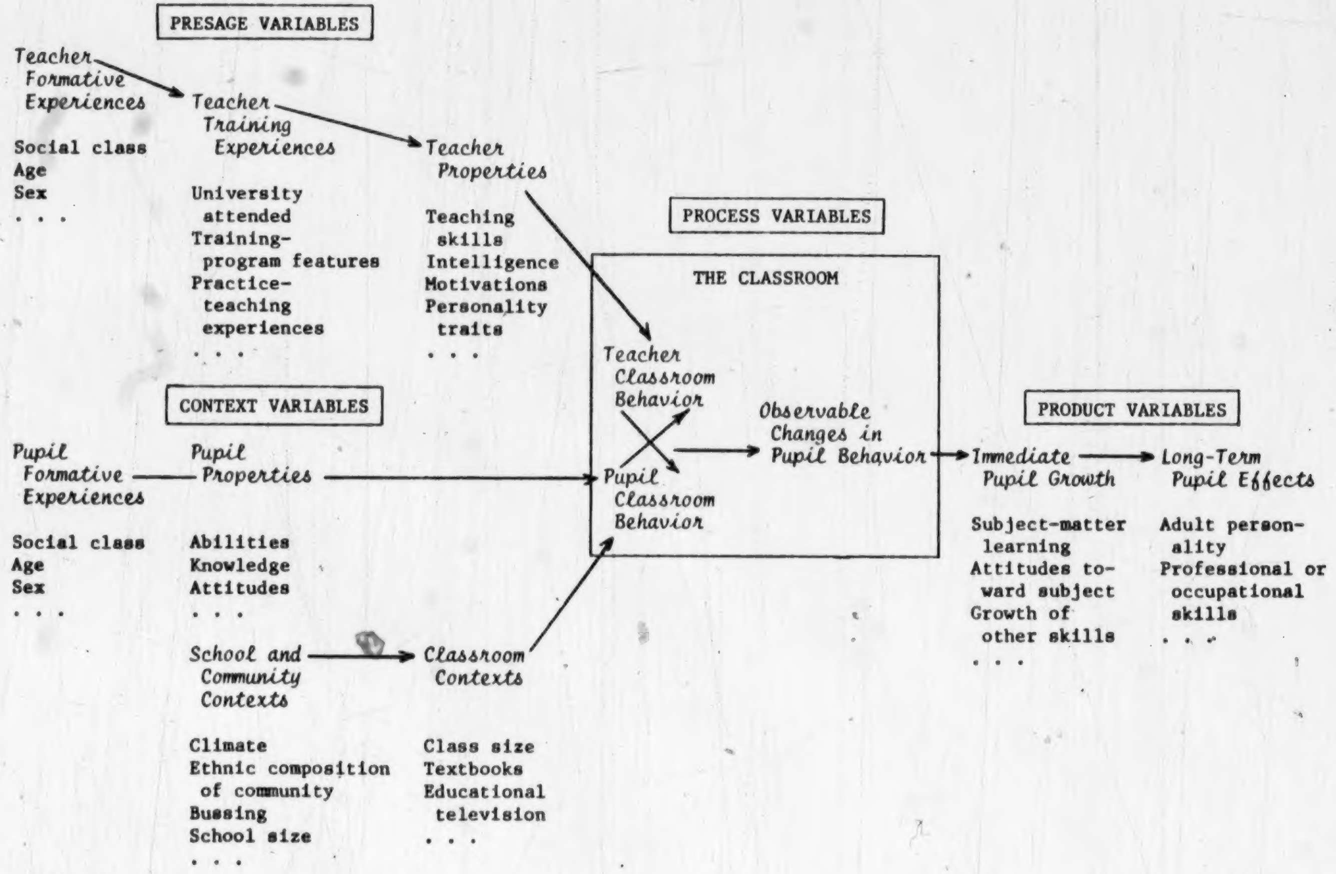

PRESAGE VARIABLES
Teacher Formative Experiences
Social class
Age
Sex
. . .
Teacher Training Experiences
University attended
Training-program features
Practice-teaching experiences
. . .
Teacher Properties
Teaching skills
Intelligence
Motivations
Personality traits
. . .
CONTEXT VARIABLES
Pupil Formative Experiences
Social class
Age
Sex
. . .
Pupil Properties
Abilities
Knowledge
Attitudes
. . .
School and Community Contexts
Climate
Ethnic composition of community
Bussing
School size
. . .
Classroom Contexts
Class size
Textbooks
Educational television
. . .
PROCESS VARIABLES
THE CLASSROOM
Teacher Classroom Behavior
Pupil Classroom Behavior
Observable Changes in Pupil Behavior
PRODUCT VARIABLES
Immediate Pupil Growth
Subject-matter learning
Attitudes toward subject
Growth of other skills
. . .
Long-Term Pupil Effects
Adult personality
Professional or occupational skills
. . .

Figure 1

A Model for the Study of Classroom Teaching (Dunkin & Biddle, 1974:38)

Developed from Mitzel's (1960) Explanatory Model (Encyclopedia of Educational Research) from each of six classes) in order to complement the other studies, and to help "bridge the gap between statistical scores and human characteristics" (Sears and Sherman, 1964) in so far as the total pupil data are concerned. In this way, this study should make a contribution to a better understanding of the complex, multifaceted factors which affect pupil classroom behaviours. Also, it should add to the discussions concerning the suggestion that "the settings are not functional for the desired outcomes" of effective teaching in classrooms (Rosenshine and Furst, 1973).

## Definition of Terms

Behavioural styles: Specific combinations of student behaviours which are defined as "coping styles" in the CASES instrument (Spaulding and Papageorgiou, 1972)—see Appendix A.

Teacher directed (TD) settings: Those learning situations which are more directly under the control of the teacher; for example, lectures, demonstrations, teacher-led classroom discussions (Spaulding and Papageorgiou, 1972).

Non-teacher directed (NTD) settings: Those classroom learning situations which rely more on the student than on the teacher for attending to the task at hand; for example, program directed activities, seatwork, free choice activities (Spaulding and Papageorgiou, 1972).

Operator data: Data which are generated through the direct, artificial intervention of an investigator, typically causing the subject to respond in specific ways; for example, paper-and-pencil tests, structured interviews (Barker, 1968).

Transducer data: Data generated by an investigator from recorded observations of naturally occurring psychological phenomena; for example, non-participant and unobtrusive observations of subjects (Barker, 1968).

## Limitations

For want of a generic term, this study may be said to resemble most closely a micro-ethnographic approach to the case studies of six children in their classroom contexts. The study of these children was in some ways constrained and in other ways enriched because it was part of a unified research project involving six investigators in all.

Ethnographic study typically requires an extensive time involvement on the part of the ethnographer with the people and in the situation under study. Such an arrangement was not possible in this study, although all six investigators shared in the generation of data in various ways over a four-week period of observation, and a further four-week period of data collection.

Because the six investigators observed naturally occurring behaviours in classroom settings while lessons were in progress, there was the possibility of reactive effects. Before the collection of data, however, the investigators spent one week of familiarization visits to classrooms and established themselves as welcome, non-participant observers. Also, throughout the in-school period of the investigation, the researchers were repeatedly assured by the teachers and school principals that their presence was not unduly obtrusive and was, in fact, a welcome social event.

This study is further limited to the measures of validity and reliability of the various instruments and tests used, the various school and teacher documents examined, and the accuracy of the observation instruments used.

## Outline of the Study

Chapter I has introduced the topic and purpose of this study. A number of research questions has been posed, and this study has been placed in the context of a broader research project (see Figure 1, p. 6). Terms have been defined, and limitations and delimitations have been stated.

Chapter II presents a brief review of several areas of literature which are pertinent to this study. These areas include: classroom observation systems; types of descriptive studies; the conduct of research through collaborative endeavours; causal behaviours in classroom settings; educational evaluation; and generalizing from case studies.

Chapter III outlines the design of this study and places it in its broader context as part of a unified research project. The sample, data sources, procedures and methods of data analysis are also presented.

Chapter IV introduces the community and the two schools in which this study was conducted. Case studies of six children, three from each school, are presented with a concluding interpretive discussion to each case study.

Chapter V summarizes this investigation, and presents selected implications and recommendations arising from the study.

The Appendices contain summaries of the assembled data, information concerning the instrumentation, and descriptions of the research personnel.

## Chapter II

# REVIEW OF RELATED LITERATURE

### Introduction

Teaching may be one of the oldest of human activities and professions, but the scientific approach to education has been with us only since 1900 (Clifford, 1973). Although some may consider that this has been sufficient time to develop a science of education, Good and Brophy (1974:1) point out that educational research has produced "relatively few findings which can be usefully applied to the improvement of educational practice." Several other reviews published in recent years have reached similar conclusions (Berliner, 1976; Dunkin and Biddle, 1974; Heath and Neilson, 1974; Rosenshine and Furst, 1973).

Part of the problem in the study of education may be attributed to the precipitous "leap from the armchair to the laboratory" (Wright, 1960) without pausing to determine the nature of education at its most elemental level—in the classroom. Adams and Biddle (1970:3) note that we cannot complete the statement, "In classrooms of such and such a kind, the pupils and teachers habitually spend the time in the following ways. . . ."

Another part of the problem may be related to an over-emphasis on numerical studies in the nomothetic tradition. Getzels and Thelen (1960:27) have pointed out that:

> To understand the observed behaviour of . . . specific teachers and specific pupils, it is not enough to know only

> the nature of the roles and expectations— . . . we must also know the nature of the individuals inhabiting the roles and reacting to the expectations.

There is now a burgeoning interest in individual teacher behaviours (Adams and Biddle, 1970; Borich and Madden, 1977; Brophy and Evertson, 1976; Peterson and Walberg, 1979) and teachers' classroom interactive thought processes (Clark and Joyce, 1975; Conners, 1978; Cooper, 1979; Marland, 1977; Morine, 1976; Shulman, 1965). Studies such as these are helping to generate and develop theories of teacher behaviours. But there is still a paucity of information dealing with the perspectives of individual pupils, even in terms of describing the context or ecology of classroom life (Boydell, 1975).

The study of education has also been hampered by the multiplicity and complexity of interactive classroom behaviours, and the adequate means to record and evaluate such behaviours. Most commonly, attempts have been made to study the effects of teachers on pupils, especially in terms of pupil academic outcomes (Keeves, 1974; Medley, 1979). To a lesser extent, researchers have investigated the effects of pupils on teachers (Doyle, 1979), pupils on pupils (Zeichner, 1978), and the properties of the physical environment on pupils (Beeken and Jantzen, 1978; Getzels, 1974; Kounin, 1977; Weinstein, 1979). Few studies, however, appear to have attempted to report on and interpret the totality of the school experience for children.

The problem in the study of education has been further compounded by the nature of much of what passes for research at the doctoral level. In particular, doctoral studies have been criticized for being "one-shot" studies (Clifford, 1973) which attempt to stand on their own feet, instead of becoming "part of a bigger entity" (Tukey, 1969, quoted in Shulman, 1970). The bigger entity may be interpreted to include several investigators, pursuing different lines of enquiry, utilizing varied instruments, and combining several research traditions—but all contributing to and benefiting from a common data base.

Finally, the matter of interpretation and evaluation of activities, behaviours, and events in educational settings is also an unresolved and even contentious issue. Following the natural science tradition, there are those who appear only to accept the findings generated by quantifiable evidence based on large sample studies. Others have argued for the validity of the informed and discriminating interpretations of events made by naturalistic research observers.

A further argument may be made for the reporting of observations in such a complete and descriptive manner that evaluative and interpretive judgements may reasonably be made by the well-informed reader of the research report. Also, it has been argued that the generalizability of even nomothetic studies is often limited because of a lack of contextual information (Dunkin and Biddle, 1974:13). On the other hand, when fully described, individual case studies may achieve helpful degrees of generalizability (Kennedy, 1978; MacDonald and Walker, 1975; Stake, 1978; Willis, 1978).

In a limited way at least, this study attempts to deal with many of the problems briefly referred to above. Several observational instruments have been used in order to capture much of the totality of classroom settings. The data are presented in considerable detail with much contextual information. Advantage has been taken of the fact that the data were collected by a team of six investigators, each of whom had a particular area of interest. In presenting and discussing the data, attempts have been made to suggest reasonable causal links between and among facets of the classroom ecology. And, finally, in selecting what appear to be salient features in the study, tentative interpretive and evaluative comments are made.

The review of related literature contained in this chapter has two main purposes: one, to elucidate the broad framework in which this study is placed and, two, to present a brief overview of the literature related to causality among interactive classroom behaviours in order to facilitate the interpretation of the various phenomena to be examined in the presentation and discussion of each of the case studies.

There is an extensive body of literature related to interactive classroom behaviours, and to attempt a full review of it is beyond the scope of this chapter. The reader's purpose in examining this study will largely determine what in the literature is relevant to this study.

This chapter will focus on (1) systems and methods for looking inside classrooms; (2) descriptive studies; (3) causality in the classroom, and (4) educational evaluation and generalization from such case studies.

## Looking Inside Classrooms

Gage's (1963) criticism of the "black box" approach to research in education has been answered by literally scores of systems and methods for looking inside classrooms (Borich and Madden, 1977; Simon and Boyer, 1974). Most observation instruments come within one of the following classifications:

1. Categorical observation. The majority of observation instruments are category systems. Such an instrument "ideally has a category which represents every behaviour that is observed, and each behaviour fits into only one category" (Simon and Boyer, 1970:6). Every time a certain behaviour occurs, the observer will record a tally under the appropriate heading. Category systems require a low level of inference on the part of the observer and may be used to observe teacher behaviours only (e.g., Jason, Withall in Simon and Boyer, 1970); pupil behaviours only (e.g., Spaulding's CASES, Lindvall in Simon and Boyer, 1970); or pupil and teacher behaviours (e.g., Flanders, Bellack in Simon and Boyer, 1970). A few more recently developed systems record pupil-teacher dyadic interactions (e.g., Brophy and Everston, 1973).

2. Sign observation. Some investigators have been interested in the fact of a behaviour occurring rather than the frequency of its occurrence. Systems of this type are called sign systems (e.g., Medley and Mitzel's OScAR in Simon and Boyer, 1970). Sign systems typically contain a list of events against which the observer records only one check if the appropriate behaviour occurs, regardless of how often the behaviour occurs. According to Dunkin and Biddle

(1974:72), "category systems are more sensitive, precise instruments than sign systems . . . (although) sign systems might be more reliable since they eliminate the extreme scores sometimes obtained with category systems."

3. Rating scales. School administrators and student teacher supervisors frequently use rating scales in evaluating teacher performance. Instruments of this type usually contain a set of qualities against which the subject is rated. Rating systems are based on observer subjective evaluations and require varying degrees of inference on the part of the coder. For several reasons, Dunkin and Biddle (1974:59) are critical of teacher rating scales; on the other hand Rosenshine and Furst (1971) and Berliner (1976) give evidence and support to the reliability and utility of such scales in identifying successful teaching behaviours. Variables which have achieved prominence in rating scales include clarity and enthusiasm (Rosenshine and Furst, 1971), warmth (Truax, 1971), withitness and overlapping (Kounin, 1970).

4. Anecdotal reports. Probably the earliest, and still the most frequent reports on teaching are anecdotal. In this form of observation the observer simply records what is seen taking place. Dunkin and Biddle (1974:58) refer to this procedure as "informal observation," but the use of the term informal may be unfairly misleading and derogatory. Anecdotal reports may take several forms, from the second-by-second accounting of behaviour of one individual compiled by a team of non-involved observers (Barker and Wright, 1951), to the highly involved role of the participant observer (Smith and Geoffrey, 1968).

5. Mapping. Comparatively little attention has been given to the perambulations of classroom inhabitants. Only five of the instruments featured in Simon and Boyer (1974) and one contained in Borich and Madden (1977) specifically record the location of teachers and/or pupils. A study of "traditional," elementary classrooms by Adams and Biddle (1970) identified three main areas for teacher occupation: (1) "the footlight parade," mainly the centre-front of the room, where teachers spend an average of 68 percent of their total time; (2) "the inland excursion," down the centre of the room, where teachers spend eight percent of their time; and (3) "the grand tour," around the outside edge of the room, where teachers spend 15 percent of their time. Adams and Biddle (1970) also determined that, in the classrooms they observed, the location of pupils in relation to teachers had a significant effect on the nature and quantity of verbal interactions.

6. Environmental factors. Bloom (1974:11) has expressed the hope that "serious investigators in the social sciences and education will be alerted to the role of environmental processes in accounting for many aspects of human development and learning." Many of what Bloom would term "environmental processes" are not observable through classroom observation instruments (e.g., socioeconomic status, need achievement, intelligence). But other, more tangible, environmental factors (e.g., materials, furnishings, temperature) may be observed and have been included in a limited number of classroom observation instruments. Borich and Madden (1977) list three such instruments, and Simon and Boyer (1974) list five instruments which include environmental factors such as use of hardware materials, training aids, and room arrangement.

## Summary

Classroom observation instruments provide essentially what Barker (1968) has termed "transducer data." The significance of this term is that data obtained via transducer methods reflect the naturally occurring behaviours of people and the natural appearance and occurrence of objects and events. Transducer data are in contrast to "operator data," which typically include the results of paper and pencil tests and interviews. In the case of operator data, the subject is required to respond to the stimulus supplied artificially by the researcher rather than naturally in the context of the natural environment.

In reviewing the various groups of instruments listed above, one is conscious that each instrument, in laying stress on certain variables, loses sight of other variables within the classroom scene. In order to obtain as accurate and complete a picture as possible, it makes eminent sense to "not hestitate to use all the ways of knowing at our disposal" (Jackson, 1968:vii), advice which is echoed by Mackay and Osoba (1978:12). In this study it was possible to collect data using several types of observational instruments, each complementing the others to help fill in the picture of each classroom.

## Descriptive Studies

In a paper titled "Research on classroom realities: Who needs it?" Doyle (1978:2-4) claims that "educational research has generally followed a Thorndikian tradition, i.e., the study of educational phenomena is to produce information useful in improving the quality of education." The significance of "this search for effective practices," he continues, is two-fold. First, there is a press "toward the reduction of data to the fewest number of generalizable indicators as possible," and "the intent to produce prescriptions for practice shapes decisions concerning the adequacy of the information that is gathered." Second, he points out, those primarily affected by these prescriptions are "those who make decisions for and about teachers," and he doubts that "information that is reduced, de-contextualized, and selected in terms of a restricted set of criteria (e.g., achievement scores) is of any use to classroom teachers." Doyle concludes his argument by suggesting that a more descriptive approach to educational research is required, "one which merely seeks to explicate the phenomenon of education in its many possible forms."

Schwille and Porter (1976) also recognize the valuable contributions anthropology and sociology have made to the understanding of "schooling." They argue that:

> If education involves different understanding by different actors of its multiple objectives, procedures and outcomes, then the parsimonious analyses of educational psychology, incorporating but few variables, are at best incomplete guides to change . . . Fieldworkers aim to acquire data which are 'rich' and which can lead to an analysis which is 'holistic.' (pp. 3, 4)

Together with many other researchers in education (Dunkin and Biddle, 1974; Rist, 1973; Smith and Geoffrey, 1968; Tikunoff, Berliner, and Rist, 1975; and Wolcott, 1975), Doyle (1978) and Schwille and Porter (1976) have argued for more descriptive studies of the natural classroom settings. To take the argument a step further, one might borrow a phrase from the social anthropologist Ryle and call for educational research which has "thick description"

(Geertz, 1973:6). According to Geertz (1973:7), in thick description "lies the object of ethnography: a stratified hierarchy of meaningful structures."

This section of the chapter will present methods of conducting descriptive studies, all of which have a common base in attempting to provide rich or thick descriptions of the behaviours of people in their natural habitats.

### 1. Ethnography

Ethnography is a term which is derived from the field of anthropology: it "provides the basic descriptive data on which cultural anthropology is founded" (Wolcott, 1974). The ethnographer is a fieldworker who observes and records social intercourse in its natural context, thereby establishing an account which can be consulted, analysed, and reconstituted or reconstructed.

Beginning in the 1960's, several ethnographic studies appeared which described the totality of school or classroom life (King, 1967; Rist, 1973; Tikunoff, Berliner, and Rist, 1975; and Wolcott, 1967). In some cases (e.g., King, 1967 and Wolcott, 1967) the ethnographers were full participant-observers, serving in the role of teachers in their subject classrooms or schools, typically for a full school year. In other cases (e.g., Rist, 1973) the ethnographers served as both participant and non-participant observers, but essentially in the role of observers and not teachers.

In a mass approach to ethnography, the Beginning Teacher Evaluation Study (BTES) ethnographic study (Tikunoff, Berliner, and Rist, 1975:30) met its designated goal of generating "variables of promise in the study of teacher effectiveness." After special testing, 40 of 200 volunteer classrooms were selected—20 at each of the grades two and five levels. After a three week training period, each of 12 ethnographers spent one week observing and preparing protocols in four of the classrooms. The protocols were later used to generate 61 variables, of which two related to classroom factors, seven to pupils, and 52 to teachers.

The studies by Wolcott (1967) and King (1967) were both based in Canadian Indian school settings in Western Canada and depicted situations unique to those schools. Rist's (1973) study was conducted in a black ghetto of St. Louis, Missouri, and focused on one group of children as they moved from kindergarten to grade two over an 18 month period. The BTES study would appear to be unusual in its use of the ethnographic approach for quite limited and specific ends.

According to Geertz (1973:20), there are four characteristics of ethnographic description:

> It is interpretive; what it is interpretive of is the flow of social discourse; . . . the interpreting involved consists in trying to rescue the 'said' of such discourse from its perishing occasions and fix it in perusable terms; . . . it is microscopic.

Geertz (1973:21) warns against trying to generalize from such microscopic studies, although broad interpretations and abstract analyses may be approached "from the direction of exceedingly extended acquaintances with extremely small matters."

Whether or not ethnography has a theory component and, if it does include theory, what part theory plays in ethnographic study, is a matter of some debate. In a discussion of the ethnographic approach to research in schools, Wolcott (1974:114) reveals his own uncertainty as one whose approach is largely "unfocused and atheoretical" but who is becoming increasingly convinced of the need for "some degree of problem orientation and of the influence of some underlying assumptions even in the most basic descriptive work." He also notes the extreme views of Berreman (1968:399)—"good theory is essential to good ethnography"; and Kutsche (1971:957)—"good ethnography is good reporting and . . . ethnographic facts clearly and accurately presented are likely to survive the theoretical frame of reference of the man who recorded them."

Geertz (1973:24) discusses theory, "the besetting sin of interpretive approaches to anything," at some length. He does not deny the difficulty of the theoretical development of cultural interpretation, and states that "description and explanation" in the experimental and observational sciences, are replaced by "inscription (thick description) and specification (diagnosis)" (p. 27) in anthropology. And in noting "the need for theory to stay rather closer to the ground than tends to be the case in sciences more able to give themselves over to imaginative observation," Geertz (1973:24) echoes Glaser and Strauss' (1967:1) call for more "grounded theory"—"the discovery of theory from data." Placing the whole question of theory into an educational context, Shulman (1970:383) urged the pursuit of "a relatively atheoretical path in the study of education" in order to create "theoretical formulations that can be useful in guiding educational thought."

### 2. Micro-ethnography

Sindell (1969:594), in an article titled "Anthropological approaches to the study of education," identifies three principal foci of research:

> Schools and their relations with the socio-cultural milieux in which they exist; the description and analysis of classroom processes; and the study of individual pupils and education.

Studies which fall into the third category have been termed "micro-ethnographic" (Smith, 1967). Although it would be difficult to complete any ethnographic study without gathering information from all three of Sindell's categories, the important discrimination is in the focus of the study.

Micro-ethnographies such as those by Smith and Geoffrey (1968), Smith and Keith (1971), and Wolcott (1974) have done much to illuminate and explicate the role of teachers and administrators, but there are as yet few micro-ethnographies which study normal children as pupils in regular public school settings. Where children have been studied in detail, it has often been because of some perceived abnormality, and the nature of the study might be more aptly termed "case study."

### 3. Case Study

"Case studies of children were originally devised for use in mental hygiene or social work clinics" (Rothney, 1968:3), even so, the case study approach has been and is used in various situations. The essence of the clinical approach in case studies is "to present the individual as a total functioning personality" (Millard and Rothney, 1957:2) and in order to arrive at an understanding of the child and his individuality, information is typically collected by informal observation, interviews, and structured testing procedures—including various psychological and sociometric tests. Also, the child's growth and development are often studied over time, and traced back to infancy or birth. In the case study approach, therefore, the focus is on the individual child as an entity rather than on the child in his milieu as, for example, a school pupil.

This last point is what most clearly distinguishes a case study from micro-ethnography. Although Wolcott (1974:112) seems to be suggesting that "'case study' provides a handy and unassuming label" for ethnography, he also points out that "ethnography suggests both a more comprehensive and detailed report and the perhaps unattainable ideal of a complete and perfect account."

Sears and Sherman (1964:iii) used the case study approach "to increase understanding of the development of children in their middle-childhood years." In this project, eight children were studied in depth over a two-year period (fifth and sixth grades). Each of the children is described as normal but, through an intensive study, an accurate profile and personality were ascribed to each child. Information collected on the children included measures of self-esteem, standard achievement tests, mental ability tests, tests of creativity, teachers' judgements, peer nominations, and teacher and observer anecdotal reports.

Millard and Rothney (1957) have presented case histories of 23 children based on data obtained from infancy through high school graduation. Their purpose was to present "analyses of the growth and behaviour of individual pupils" (p. v), particularly in their elementary school years. But the authors make it clear that "when occasional reference is made in the Observation Notes to the school and the teacher-pupil-curriculum relationships *the purpose is only to highlight individuality*" (emphasis added, p. 24). Information collected on the children included achievement test results, school marks, ratings of mental characteristics, mental tests, demographic data, home and family data, behaviour, and observation notes compiled by observers and teachers. In addition, pupils wrote autobiographies and were interviewed on a number of occasions.

### 4. Specimen Description

Wright (1960:83) states that specimen description "begins with the scheduled and continuous observing and narrative recording of a behaviour sequence under chosen conditions of time and life setting." In this method, the observer records virtually everything that happens. The recorded notes are subsequently submitted to analysis and possibly quantification for whatever purpose the researcher has in mind. Wright (1960) notes that this method of observation has been used in a variety of settings since the early 1900's.

Using specimen description, Barker and Wright (1951) made a detailed, day-long study of the life of one young boy. The boy was observed continuously by a team of observers working in 30-minute shifts from just before he awoke in the morning, until he fell asleep at bedtime the same day. As well as these observations, notes and records were also made of the boy's community, countryside, home, and school settings. Wright (1967:1) notes that "the application of this method is ecological in purpose" that is, it is concerned with the natural environments, related structures, and functions of the observed child. Again using specimen description, Barker and Gump (1964:202) observed student behaviour in two schools varying in size. Concerning the optimum size of a school, they found that:

> A school should be sufficiently small that all of its students are needed for its enterprises. A school should be small enough that students are not redundant.

As mentioned above, specimen description has been used in a variety of situations. Spaulding and Papageorgiou (1975:53) noted that "all human behaviour is influenced to some degree by variations in the stimulus setting" and acknowledged the use of specimen description in developing the Coping Analysis Schedule for Educational Settings—an instrument designed for observing and recording the classroom behaviours of pupils.

### 5. Shadow Study

The shadow study method of observing is similar to specimen description in that the subject is observed continuously in all naturally occurring settings. But whereas in specimen description the subject may be quite aware of the person and purpose of the observer—and may interact with the observer, in the shadow study the observer is a non-participant and as unobtrusive as possible. Because of the difficulty of maintaining continuous notes, the shadow study observer frequently time samples the subject's behaviour. Additionally, the observer usually compiles recollections of the subject's behaviours and activities upon completion of the assigned period of observation.

Lounsbury and Marani (1964), noting that "the real curriculum is the one the pupil experiences," devised a study "to see what happens to the pupil as he lives in a junior high school on a typical day." In this study, 102 observers working in 98 schools in 26 states observed 102 grade eight pupils. The subject pupils were randomly selected and observed unobtrusively. At the end of the school day, each subject pupil was interviewed by the appointed observer. Lounsbury and Marani (1964) were able to come to the general conclusion that for at least 102 boys and girls on one day, school was not a particularly enjoyable or educationally profitable place to be. They also concluded that "this technique (shadow study) is deserving of more general use by members of the profession as a means of identifying and coming to grips with the realities of education."

Burnham (1970:8) attempted to answer a number of questions pertaining to open plan schools. Some of the questions related to pupil activities and behaviours, thus "the most important consideration" of the study was "to produce a clear picture of what it is like to be a pupil in an open plan school." Six observers were used to conduct shadow studies in a total of 15 classrooms. Their observations were guided by seven pre-determined criterion behaviours. Although Burnham (1970) admits to not having clear answers to all his questions, he did consider enough was learned to obtain a vicarious view of life in classrooms for the subject pupils, and also that sufficient information was obtained to help in local educational decision making.

In a study comparing two open plan classes with one traditional class, Edwards (1973) devised an interaction-network instrument to assess pupil-interactions and movements. Although the term shadow study was not used, two observers used essentially this technique to record pupil movements and five-second time samples of the subject pupil's interactions. An interesting facet of this study was the attempt graphically to record the pupil's movement in terms of purpose and location.

## Summary

Lewin (1936) claimed that behaviour is the resultant of two interdependent vectors—person and environment—operating "in a dynamic field of life space." Descriptive studies, to a greater or lesser extent, attempt to record the totality of behaviours in Lewin's life space. Wright (1960:72) uses the term "observational child study" as a collective noun for research methods which involve direct observation as a scientific practice that includes observation and analysis of naturally occurring things and events. He points out that "direct observation has been a methodological mainstay in many other sciences."

Undoubtedly, in any given life space or behavioural setting, some factors have greater significance than others in terms of the behaviours and perceptions of the persons therein. The problem in education, from the pupil's perspective at least, is still to try to identify those factors which have significance. Walberg (1970) has stated that much of the reliable variance in student performance is attributable to the aptitude of the learner and the environment of learning and, therefore, perhaps only a small part is played by instructional variables and interactions among the three factors. He concludes that research on teaching-learning should provide for analysis of aptitude and environment, and interaction with instruction.

In this study, elements of the various descriptive study methods reviewed above will be used and combined in order to arrive at an ecological and ethnographical view of classroom settings, and the perceptions and behaviours of selected pupils in those settings. And in so doing, possibly a response may be made to Lesser's (1971:7) assertion that:

> Recognizing and respecting the individual differences among children now has become one of education's most cherished chestnuts (but) . . . rarely . . . have we gone beyond the pious assertion of the existence of these differences to ask: What individual differences are most relevant educationally? How can knowledge of these differences be organized to guide the teacher's analysis of interactions in the classroom? How should an accurate diagnosis and interpretation of individual differences affect the form and timing of instruction and the choice of educational goals?"

## Causality in the Classroom

Clarke (1968) has cited a number of principles concerning effective classroom teaching. His first principle was that all behaviour (including misbehaviour) is caused. Implicit in this principle is the concept of causality, and especially for teacher instigation of cause-and-effect classroom relationships. But Dunkin and Biddle (1974:46) caution against this simplistic view and state that "conclusions concerning cause-and-effect relationships in the classroom are unvalidated unless checked with manipulative experiments."

In spite of Dunkin and Biddle's cautionary comment, there seems to be general consensus (Gage, 1975) that teachers' behaviours and expectations have at least some effect on pupil behaviours, perceptions, and learning outcomes. The literature briefly reviewed below focuses on some of the more commonly discussed possible causal ascriptions and classroom processes.

Much has been written concerning what has been variously termed "teacher-expectancy effects," the "Pygmalion effect," "self-fulfilling prophecy," and "teacher faith" (see Braun, 1976 and Crano and Mellon, 1978). The argument for teacher-expectancy effects received much publicity, although little acclaim, from the publication Pygmalion in the Classroom (Rosenthal and Jacobsen, 1968). In the succeeding years, through further research and discussion, the status of the teacher-expectancy effects phenomenon has been refined. Although there now seems to be general agreement that definitive research on the topic is still to be done, Crano and Mellon (1978) have stated what appears to be the consensus position that teacher expectations for pupils do exist and do indeed affect the behaviours and achievements of pupils.

If there is general agreement on the fact of teacher expectancy effects, there is still much discussion and disagreement concerning the factors which give rise to teacher expectations and the ways in which these expectations affect pupils. Braun (1976) has presented "a graphic illustration of the flow of the behavioural cycle" (Figure 2) to explain the probable complex nature of the factors involved. Braun (1976:191) cites Finn (1972) and Kehle (1974) in support of the contention that "the effects of teacher's expectations cannot be simply explained and that they are probably the result of complex relationships among variables."

From Figure 2, it is important to recognize that teacher expectations are themselves subject to many influences or inputs. Some of the inputs suggested in Figure 2 and investigated by researchers include factors over which pupils have no control (e.g., sex, SES, facial attractiveness, and family background). Other factors which might be termed student input include pupil controlled behaviours such as attending to classroom instruction and neatness in worksheets.

In discussing his model (Figure 2), Braun (1976:205) develops the concept of "self-expectation." This concept is part of the cycle between teacher input and learner output. In situations where the pupil suffers from a low self-concept, the model can more aptly be termed a vicious cycle, wherein the learner's low self-image induces unsuccessful behaviours and low levels of achievement which reinforce the low self-image. Thus, pupil self-expectations resulting in certain behaviours may be seen to affect teacher expectations, attitudes, and behaviours towards individual pupils.

Brustein (1978:6) also noted that "failure-prone children who refuse to take the responsibility for the consequences of their behaviour, apparently become trapped in a self-perpetuating cycle of dynamics" (Braun's "vicious cycle"). She explains that this state arises as a result of classroom experiences in which "reinforcement is based on terminal behaviours (i.e., achievement), rather than on the means to the end (i.e., effort)." Children trapped in this vicious cycle are likely to become "frustrated and demoralized . . . moving

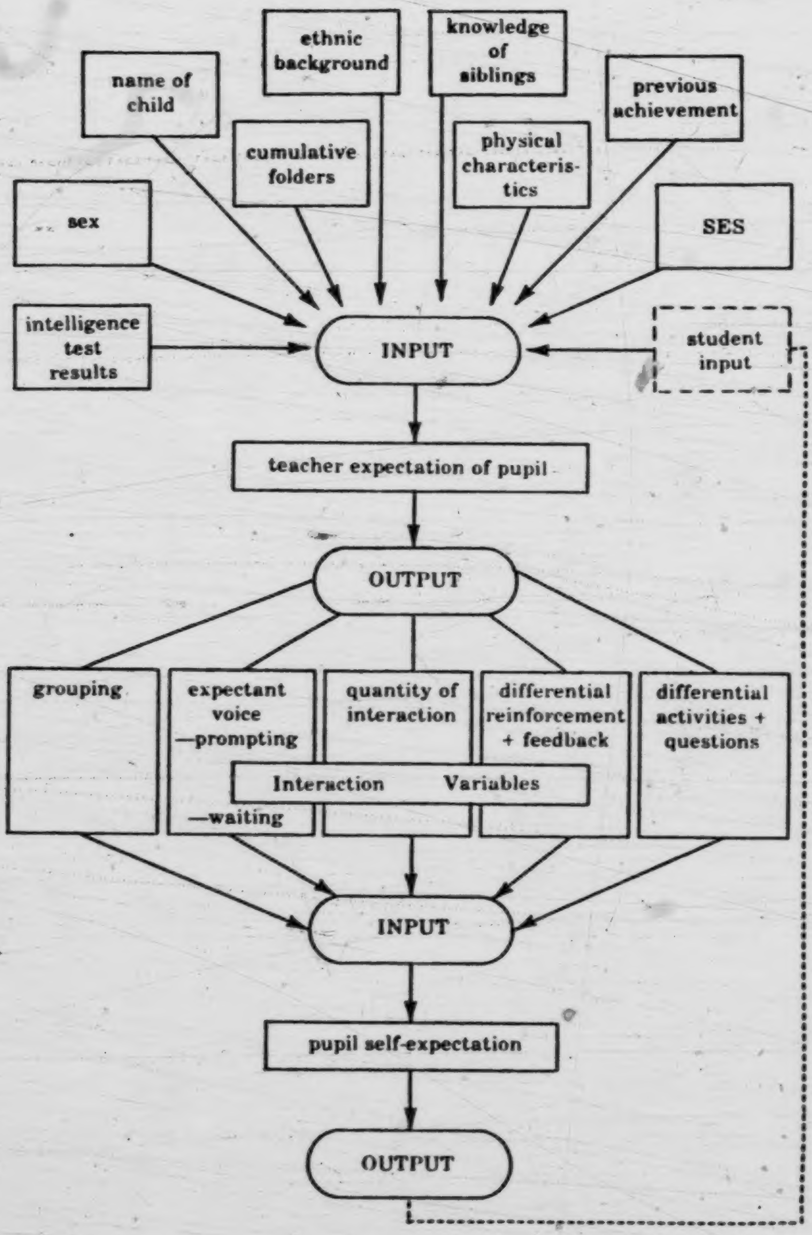

name of child
ethnic background
knowledge of siblings
previous achievement
cumulative folders
physical characteristics
sex
SES
intelligence test results
INPUT
student input
teacher expectation of pupil
OUTPUT
grouping
expectant voice —prompting —waiting
quantity of interaction
differential reinforcement + feedback
differential activities + questions
Interaction Variables
INPUT
pupil self-expectation
OUTPUT

Figure 2

The Behavioral Cycle between Teacher Input
and Learner Output
(Braun, 1976:206)

into a state of learned helplessness" (Brustein, 1978:6).

In studies conducted in both the laboratory and the field, Dweck, Davidson, Nelson, and Enna (1978) related learned helplessness to sex. According to Dweck et al. (1978:274), their studies demonstrated that "the pattern of evaluative feedback given to boys and girls in the classroom can result directly in girls' greater tendency to view failure feedback (from teachers) as indicative of their level of ability." This perception arises because, whereas teachers are more critical of and give more negative feedback to boys, they are more accepting of and give more praise to girls. Thus, boys may more easily attribute negative feedback to the general attitude of the teacher rather than to their own ability. Girls, on the other hand, being given generally more positive attention by teachers, receive negative feedback for intellectual failures in a highly specific manner with little or no emphasis on motivation as a determinant of failure. Girls, therefore, attribute failure to lack of ability and begin to develop attitudes of helplessness.

The development of a theory of attribution (Weiner, 1974; Weiner and Kukla, 1970) has received some recent attention (King, 1979). According to Bar-Tal (in press), Weiner suggested that "an individual's causal perception of success and failure mediate between the antecedent conditions and achievement-related behaviour" and is subject to attributional analysis. The most commonly mentioned main causal perceptions of success and failure are ability, effort, task difficulty, and luck. According to attribution theory, ability and success originate within the person and have an internal locus of control, whereas task difficulty and luck originate outside the person and have an external locus of control. Also, ability and task difficulty are regarded as stable factors, whereas effort and luck are unstable. Viewed in this way, it is seen that effort is subject to change and may be controlled internally and thus assumes a dominant position in a pupil's likelihood for achievement. According to Bar-Tal (in press), empirical evidence indicates that pupils can clearly explain the causality of their successes and failures, and that the types of causes given by pupils determine their achievement-related behaviours (e.g., pupils who attribute failure to unstable causes—mainly low effort—show more persistent achievement-behaviour than pupils who attribute failure to stable causes).

Cooper (1977) and Cooper, Burger, and Seymour (1979) have proposed a teacher "personal control" model as a partial explanation of classroom interactive behaviours between teachers and pupils. Cooper's argument is based on the premise that teachers desire to exert control over the duration, content, and timing of classroom events in order to promote their personal satisfaction. According to the Cooper, Burger, and Seymour (1979) model, teacher control over content and timing is high in teacher-initiated settings, but low in pupil initiated settings. Similarly, teacher control over duration is high in private interactions but low in public interactions. Thus, teacher control is highest in teacher initiated private interactions, but lowest in pupil-initiated public interactions.

If Cooper's argument is accepted, then teachers who have high control needs will tend to dominate classroom interactions, and will discourage pupil initiatives, especially in call-out situations. Also, since low-achieving pupils usually more frequently require more assistance involving more time, teachers will tend to ignore their requests for help, especially in public settings. Comments, questions, or answers from high-achieving pupils will be more acceptable, however, since they will require little of the teacher's time and are likely to be more appropriately timed and on-topic. Cooper points out that his model has not been subjected to empirical testing.

Silberman (1969) identified four teacher attitudes towards pupil which he found more generally revealed in their actions towards the pupils, and more accurately perceived by the target pupils. The four attitudes are (1) attachment—an affectionate tie which brings pleasure to the teacher; (2) concern—sympathy and support for a pupil's academic and/or emotional problems; (3) indifference—teacher's lack of involvement because the pupil fails to excite or dismay the teacher; and (4) rejection—teacher's refusal to consider the pupil as worthy of the teacher's energies.

According to Silberman's research, teachers revealed their attitudes towards pupils by initiating contact (the frequency of the contacts approximated the degree of involvement the teacher felt); by making evaluative comments in connection with pupil behaviours; and by acquiescing (the extent to which the teacher was receptive to approaches made by pupils). In operationalizing evaluation and acquiescence, teachers found ways to allocate rewards and punishments to target pupils. In his original studies, Silberman (1969) found that teachers' attitudes of concern and indifference were more in evidence than rejection and attachment.

### Summary

The tabulation of causal behaviours described above is not intended to be exhaustive. The purpose in introducing the concept of causality in the classroom here is to alert the reader to the possible relevance of these models in the discussions of each of the case studies. Most of the causal models presented here focus on the teacher as of prime importance thus, in the presentation of each of the case studies, considerable effort has been invested in describing the personality, attitudes, instructional goals, classroom procedures, and behaviours of the teacher. From the descriptions provided, it is possible that other models may be posited.

## Evaluation of and Generalization from Case Studies in Education

### Evaluation in Education

In a paper titled "To evaluate an arts program," Stake (1976:123) cites Thoreau as having said "Could a greater miracle take place than for us to look through each other's eyes for an instant." Looking through the eyes of another is essentially what observation studies (e.g., descriptive case studies, ethnographies, and micro-ethnographies such as the study reported on here) are about. Stake (1976:123) extends Thoreau's statement by claiming that, "Human observers are the best instruments we have for gathering data on many evaluation issues." Having gathered and presented the data, the questions of interpretation and evaluation still remain, however. This section will briefly present some alternative views on the topic of educational evaluation.

### 1. Qualitative evaluation

According to Willis (1978), there are two forms of evaluation in education—qualitative and quantitative evaluation. Quantitative evaluation "has a logic of inference (which) is one of classification and seriation, resulting in numerical comparison" (p. 2). In qualitative evaluation, however, the "logic of inference is one of direct comparison, resulting in new insight and reclassification" (p. 2). Furthermore, whereas quantitative evaluators "often consider only the most easily observed and empirically verifiable *characteristics* of the environment," qualitative evaluators "usually attempt more fully to consider both observed characteristics and specific qualities perceived as personal forms of meaning" (p. 2). In qualitative evaluation the world is seen as largely indeterminate and problematic, "hence its qualities are seen more directly as functions of the perceptions and personal meanings the evaluator brings to the situation" (p. 2).

### 2. Responsive evaluation

Stake (1976:116) has coined the terms preordinate and responsive evaluation to distinguish between evaluation of a more formal, measurement-precise nature, and evaluation which is sensitive to particular settings. He defines responsive evaluation as "an old alternative, based on what people do naturally to evaluate things: They observe and react." Responsive evaluation also "orients more directly to program activities than to program interests; . . . it responds to audience requirements for information; and . . . the different value perspectives present are referred to in reporting the success and failure of the program." It would appear that Stake and Willis are in agreement in recognizing the evaluatory role and function of the readers or audiences of research reports.

3. Democratic evaluation

MacDonald (1976) also stresses the importance of audiences when he states that the criterion of success for a report is "the range of audiences served." MacDonald makes this statement with particular regard to what he terms "democratic evaluation." In part, democratic evaluation is defined as:

> An information service to the community about the characteristics of an educational program. It recognizes value pluralism and seeks to represent a range of interests in its formulation. The basic value is an informed citizenry, and the evaluator acts as broker in exchanges of information between differing groups. . . . The report aspires to 'best seller' status. The key concepts of democratic evaluation are 'confidentiality', 'negotiation' and 'accessibility'. The key justificatory concept is the 'right to know'. (p. 7)

In arguing for a more widespread use of case studies in educational research, MacDonald and Walker (1975) offer several recommendations. These recommendations are partly based on the premise that "Research is primarily concerned with the creation, organization and dissemination of knowledge," and it is with regard to the wide dissemination of knowledge that the concept of democratic evaluation assumes its importance. MacDonald and Walker (1975:11) state that "As we imagine and ascribe it, educational case study has as yet no practitioners," but they imply that by conducting research according to their recommendations, case studies will gain widespread acceptability. Furthermore, they will aid in the spread of knowledge, which is "the basis on which many forms of power are legitimated and, in the case of education, the medium through which power is exercised" (p. 6). Presumably, the decision to exercise power in reaction to a research report is one clear example that the contents of the study have been evaluated by influential readers.

### 4. Connoisseurship and educational criticism

Eisner (1975:7) is unequivocal in his statement that:

> Teaching is an activity that requires artistry, schooling itself is a cultural artifact, and education is a process whose features may differ from individual to individual, context to context. Therefore, what I believe we need to do with respect to educational evaluation is not to seek recipes to control and measure practice, but rather to enhance whatever artistry the teacher can achieve.

The theory which Eisner offers to enhance the artistry of the teacher is that of educational connoisseurship. Eisner (1975:8) explains:

> Because I believe the features of classroom life are not likely to be explained or controlled by behavioural laws, I conceive the major contribution of evaluation as contributing to a heightened awareness of the qualities of that life so that teachers and students can become intelligent within it. Connoisseurship plays an important role towards this end by refining the levels of apprehension of the qualities that pervade classrooms.

Connoisseurship is the art of appreciation, an essentially private encounter with a phenomenon (as, for example, in contemplating a painting, in listening to a piece of music, or in spectating at a sporting event). Through connoisseurship, one is able to communicate the observed phenomenon to others and, in so doing, become a critic of the phenomenon. Criticism is essentially a public communication.

According to both Eisner (1975) and McCutcheon (1978), educational criticism is based upon description, interpretation and evaluation. Description involves "re-creating the classroom to evoke in the readers a sense of what it is like to be there" (McCutcheon, 1978:189). Interpretation represents "an effort to understand the meaning and significance that various forms of action have for those in a social setting" (Eisner, 1975:13). And evaluation (Eisner, 1975) or appraisal (McCutcheon, 1978) is "to make some value judgements about it (the classroom) with respect to its educational significance" (Eisner, 1975:14). In summary, Eisner (1975:15) states:

> The ultimate consequence of educational criticism is evaluative in the sense that something must be made of what has been described and interpreted. The task of the critic is not simply one of neutral observer (an impossible position in any case) nor is it one of disinterested interpretation. The critic uses what he or she sees and interprets in order to arrive at some conclusions about the character of educational practise and to its improvement.

The main thrust of this study has been to describe and interpret classroom events and contexts, particularly from the perspective of individual pupils. But educational criticism is also applied in the form of summary discussions following the presentation of each of the six case studies.

The accuracy of educational evaluation may be based on several concepts. In this study, the concept of triangulation (see p. 3) has been proposed and used. Eisner (1975:17) advocates a similar concept with his discussion of "structural corroboration." Structural corroboration is an extension of triangulation in that the evidence, derived from a variety of sources, is examined for "best fit" and believability. The evidence becomes persuasive, not only because the accuracy of each piece of evidence is cross-checked, but also because the separate pieces fit together to become mutually corroborative. The concept of structural corroboration is also applied to the evaluative case study summaries in this study.

Perhaps the ultimate test of the accuracy of educational evaluation is to be found in "democratic evaluation" (MacDonald, 1976; also, see p. 38). A basic intent of this study is to present the data in sufficient detail and in such a manner that the reader may form an independent set of conclusions concerning each case study and arrive at independent "best fits." The reader's structural corroboration may then be examined and compared with that presented in this study.

In the process described above, cognizance is also taken of "qualitative" (Willis, 1978) and "responsive" (Stake, 1976) evaluation. And, through these processes (especially that of comparison with other case study reports), the believability of the data and summaries reported here may be checked and may then assist in developing educational generalizations. Willis (1978:21), summarizing Travers (1978), states that:

> Travers' essay suggests, at the least, that qualitative methods of evaluating education be soundly based on what is still known about phenomenal experience and can be particularly useful in uncovering how common perceptions and meanings develop within educational environments.

## Generalizing from Case Studies

The matter of generalizing from single case studies is discussed in a paper by Kennedy (1978). Kennedy's paper "offers a variety of suggestions for logically analyzing the relationship between a single case and a population so that generalizations may be possible." In particular, Kennedy cites methodologies used by clinicians and court justices as offering assistance to the development of a methodology appropriate for educational case study evaluation.

Stake (1978) in a paper titled "The case study method in social inquiry," argues for "naturalistic generalization"—when a case study is properly described and readers recognize essential similarities to cases of interest to them. Stake (1978:5) explains that "case studies will often be the preferred method of research because they may be epistemologically in harmony with the reader's experience and thus to that person a natural basis for generalization."

For the purposes of her paper, Kennedy (1978:5) defines two types of single case study: (a) studies of single events, and (b) disaggregated studies of multiple events. The cases reported on in this study are probably best regarded as examples of (a) single events.

Two tenets underlie Kennedy's (1978:16) discussion of generalizing from single cases. First, she states that generalization is necessarily a matter of judgement, and that the judgement "should be made by those individuals who wish to apply the evaluation findings to their own situations." Second, since the case study author "cannot know who his receivers are, he must, of course, be quite specific in both his description of the attributes of his case and in his description of the way in which the treatment influenced this case."

Kennedy (1978:16) points out that "the notion of leaving generalization up to the practitioner . . . is not an uncommon occurrence" in fields other than research and evaluation. In this context she mentions legal precedent and clinical treatments.

1. Legal precedent

Legal "case law" typifies the manner in which law is built upon the precedent of specific cases. Kennedy (1978:17), quoting Cardoza (1921), describes this process as one of "search and comparison . . . in which the attributes of the current case are compared with the attributes of a variety of other cases." Thus, through a process of search and comparison, an appropriate case may be selected and examined for commonalities with the case under study. Kennedy (1978) shows how each of the following attributes of legal tradition may be applied to case studies in education, and reiterates that these are for the guidance of users of information, not for those who generate it:

(a) the material facts of the earlier case
(b) appropriateness of the decision made in the case
(c) the reason for the decision
(d) the level of generality with which the decision was formulated.

2. Clinical treatment

In clinical treatments in the medical and psychological professions, cases may be studied to learn more about etiology, particular treatment effects, or unique characteristics (Kennedy, 1978). Cases may be studied to develop classifications or to make inferences of generalizability. Kennedy (1978:21) quotes Small and Krause (1972) who identified three important criteria for inclusion in a clinical report:

(a) longitudinal information (both extensive case history and extensive follow-up treatment)

(b) multi-disciplinary assessment of clients (representation of a variety of specialties and perspectives)

(c) precision in description (rather than imprecise or vague terminology).

It was earlier explained that the cases reported on in this study were not subjected to detailed longitudinal study, nevertheless, many aspects of the criteria mentioned above were observed in the preparation of the cases contained here. In contemplating this study, the reader is urged to acknowledge the attributes of legal tradition to the approach of generalizing from single case studies mentioned earlier in this section.

## Summary

In this section, various forms of evaluation which seem appropriate for case studies in education have been suggested and discussed. There is considerable overlap in the forms presented, and most depend upon rich or thick description, which is examined on the basis of the personal experience, knowledge, and meaning of the individual reader. Accuracy in evaluation is dependent upon complete and correct reporting (particularly using the cross-checking process of "triangulation") and the believability of the conclusions posited or arrived at ("structural corroboration").

Evaluation may also be a measure of the audiences served by the final report. Also, through widespread dissemination and understanding, the cases studied may achieve a degree of generalizability. The responsibility for generalizing from single case studies, however, is the responsibility of the recipient of the report. Assuming the accuracy and completeness of this report, the extent to which it is generalizable will depend upon appropriate comparisons with other cases as made by the reader.

## Summary

The purpose of this chapter has been to elucidate the broad framework in which this study is placed, and to present a brief overview of literature related to causality among interactive classroom behaviours. In addition, suggestions have been made concerning methodologies for evaluating and generalizing from single case studies. The following chapter describes the design of and the instrumentation used in this study.

## Chapter III

# DESIGN, DATA SOURCES, PROCEDURES, AND ANALYSIS

This chapter describes the design, subject sample, selection procedures, data sources, instruments and observation techniques, and data analysis procedures for this study.

### The Design

This study is part of a larger descriptive-correlational research project on teaching and learning conducted by a group of six doctoral students under the aegis of one supervisor. A survey of recommendations for improving research on teaching revealed some consensus on guidelines for future research. An attempt was made to consider the following guidelines in the design of this part of the larger study.

1. Research on teaching should be undertaken in a naturalistic (therefore classroom) setting. No attempt should be made to exercise control over curriculum objectives and materials or instructional settings, and testing procedures should be considered to be of lower priority than maintaining ecological validity (Bronfenbrenner, 1976; Good, Biddle, and Brophy, 1975:37; Rosenshine and Furst, 1971).

2. Variables should be collected using existing, multi-faceted coding instruments that capture a variety of both cognitive and affective interaction variables (Rosenshine and Furst, 1971, 1973; Flanders, 1974).

3. Both high-inference rating scales and low inference observation

instruments should be used to measure the same variables in the same investigation (Good, Biddle, and Brophy, 1975; Rosenshine and Furst, 1971).

4. A small number of teachers and classrooms should be studied to allow both extensive and intensive data collection, and both behavioural and introspective data collection (Brophy, Shulman -- personal conversations, Fall, 1975).

5. Coding instruments should capture the teacher-pupil dyadic relationship, as well as the teacher interacting with "the class-as-a-whole" (Bossert, 1976; Good and Brophy, 1970; Peck, 1976).

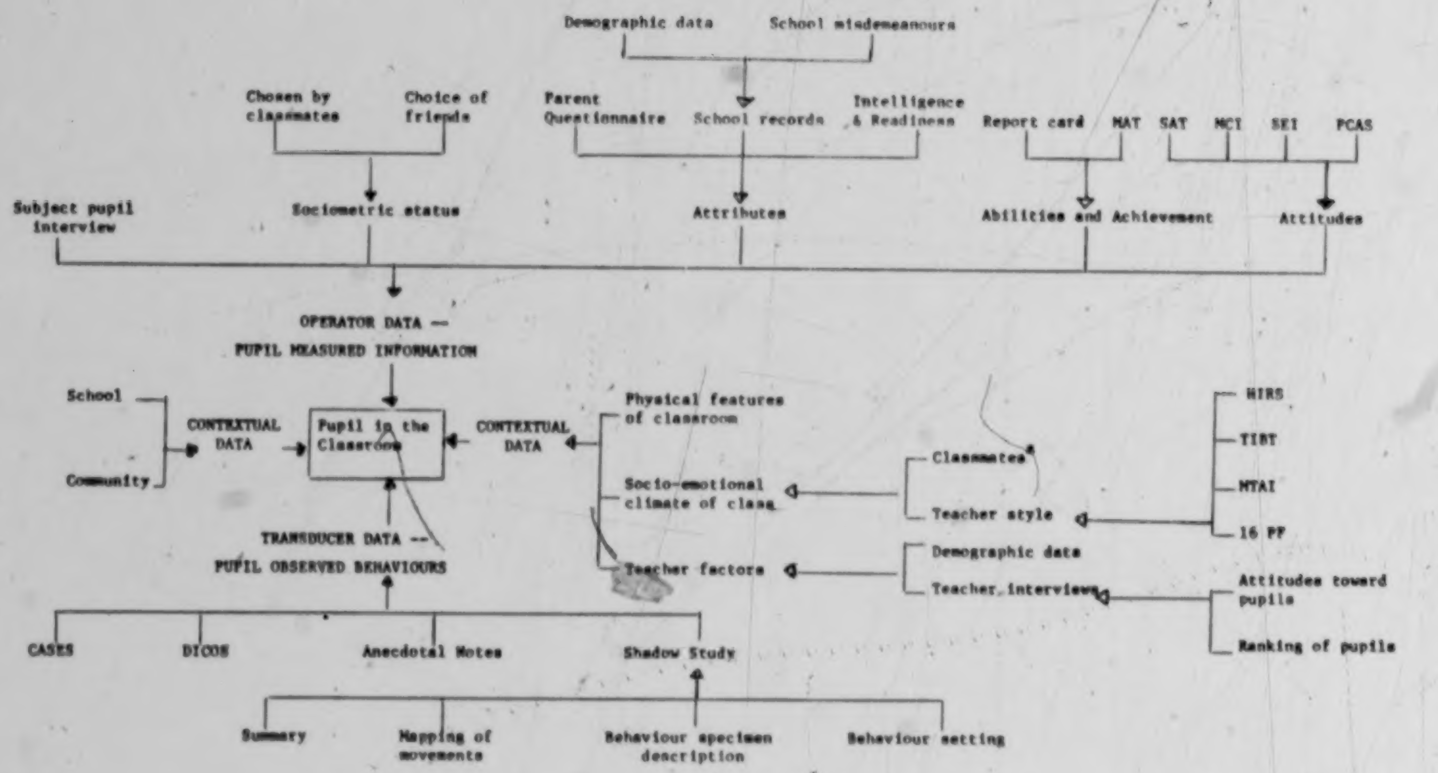
6. Enough data should be obtained to enhance the possibility of obtaining reliability and validity (Brandt, 1972; Good, Biddle, and Brophy, 1975).

7. As much contextual data as possible should be collected and reported in order for proper understanding of the study, and for satisfactory comparisons to be made with other studies (Bikkar and Fu, 1973; Dunkin and Biddle, 1974).

Further information concerning the overall group study is contained in a paper by Eggert, Fasano, Mahen, Marland, Moody, and Muttart (1976). The reader is also referred to Figures 1 and 3.

## The Sample

For the purposes of the large, combined study, an initial search was made for one of each of grades one, three, and six classes and their teachers in two schools, in order to permit comparisons between schools and across grade levels. Although several schools were approached,


Demographic data
School misdemeanours
Chosen by classmates
Choice of friends
Parent Questionnaire
School records
Intelligence & Readiness
Report card
MAT
SAT
MCI
SEI
PCAS
Subject pupil interview
Sociometric status
Attributes
Abilities and Achievement
Attitudes
OPERATOR DATA —
PUPIL MEASURED INFORMATION
School
Community
CONTEXTUAL DATA
Pupil in the Classroom
CONTEXTUAL DATA
Physical features of classroom
Socio-emotional climate of class
Teacher factors
Classmates*
Teacher style
Demographic data
Teacher interviews
HIRS
TIBT
MTAI
16 PF
Attitudes toward pupils
Ranking of pupils
TRANSDUCER DATA --
PUPIL OBSERVED BEHAVIOURS
CASES
DICOS
Anecdotal Notes
Shadow Study
Summary
Mapping of movements
Behaviour specimen description
Behaviour setting

*All measures (except the Shadow Study) were obtained for all pupils and provide contextual information.

Figure 3

Summary of Data Sources used in the Westham Study resulting in individual teachers volunteering, the desired response was not obtained. It was finally decided that, because of the constraints of time, budget, and human and material resources, the first two schools in which one teacher at each of the desired grade levels volunteered to participate would constitute the sample. This procedure resulted in a sample of two schools in one school district, and comprised six teachers and 159 pupils from grades one, three, and six as noted in Table 1. More details concerning the community, the two schools, and the six classrooms are contained in Chapter IV.

| School | Grade | Teachers | | | Pupils | | |
|---|---|---|---|---|---|---|---|
| | | Sex | Age | Experience (years) | Boys | Girls | Total |
| Jamieson | 1 | F | 40 | 17 | 14 | 13 | 27 |
| Napier | 1 | F | 34 | 12 | 12 | 10 | 22 |
| Jamieson | 3 | F | 25 | 5 | 12 | 19 | 31 |
| Napier | 3 | F | 23 | 0.25 | 13 | 15 | 28 |
| Jamieson | 6 | F | 41 | 19 | 19 | 6 | 25 |
| Napier | 6 | M | 32 | 5 | 13 | 13 | 26 |
| TOTALS | | 6 | | | 83 | 76 | 159 |

Table 1. Distribution of Large Study Sample by Grade and Sex

For the purposes of this study, one pupil was randomly selected from each of the classes, having first determined which pupils did not have parental agreement for in-depth study, and which pupils the teachers recommended not be subject to intensive study. Warnings were received for only four pupils in the total sample of 159.

Consideration was given to selecting pupils for intensive study on the basis of particular criteria, for example, high or low achievers. This suggestion was rejected, however, in order to have as representative a sample as randomization provides, and to lessen reactive effects. Teachers were not informed who the individual subject pupils were until after all measures had been taken on all students.

## Data Sources

The data for this study were collected under three major headings: Contextual Data, Operator Data, and Transducer Data. The data sources are outlined below and summarized in Figure 3.

### Contextual Data

1. Community. Descriptive data were obtained from the subjective observations of the six investigators. These data were added to via discussions with the two principals. Further statistical and descriptive data were obtained from an information services officer of the local government offices via municipal documents and unstructured personal interviews.

2. Schools. Historical, census, and descriptive data were obtained from the principals of the two schools. These data were further supplemented by discussions with teachers, and from the observations of the six investigators. Finally, some information concerning socioeconomic status resulted from questionnaires sent to parents.

3. Classrooms. Data relating to classrooms were obtained from teachers, investigators (each classroom was the particular responsibility of one of the six investigators), and pupils. The data collected

included equipment and materials inventories, observed ambient conditions, furnishings, and room decorations and displays. Also included were maps and floor plans showing the locations of doors, windows, furniture, learning centres, supplies, chalkboards, and other classroom items.

4. Teachers. In this study teachers were considered to be part of the classroom ecology and, as such, from the subject pupil's perspective, the teacher was part of the context of the child's behaviour. Data concerning teachers were collected using a variety of informal and more structured measures, as outlined below. All formal teacher interviews were conducted by the three investigators who were especially prepared for this function. All formal interviews were tape-recorded and transcribed.

a. Teacher Background Information. Teacher demographic data were obtained on a self-report questionnaire.

b. Teacher Interview Part I. Each teacher was asked to identify and comment on his/her class, instructional goals, curriculum, classroom routines, and perceived main function as a teacher (see Appendix J).

c. Teacher Interview Part II. Each teacher was asked to identify and comment on pupils in the class based on the following criteria (Silberman, 1969): (1) three pupils whom the teacher would most like to retain a second year for the sheer joy it would bring; (2) three pupils to whom the teacher would like to devote all her attention; (3) three pupils the teacher would be most unprepared to talk about should a parent visit unannounced; and (4) three pupils whom the teacher would be relieved to have removed from the class. For each question the teacher was first asked to identify one pupil, and then add two others (see Appendix J).

d. Teacher Ranking of Pupils. On two separate sets of forms each teacher was asked to rank children as follows, based on the teacher's perceptions: Form A, (1) the extent to which the teacher thought the pupils would achieve in school; (2) the pupils' usual reaction to classroom activities -- enthusiastic, interested, passive, uninterested, resistant; and (3) the pupils' academic ability -- very bright, bright, average ability, below average ability, dull.

Form B, according to how well the pupils would achieve or did achieve based on a year-end test in (1) Language Arts, and (2) Mathematics; and according to how well the pupils achieved, given the goals held by the teacher for that year, in (3) Language Arts, and (4) Mathematics. Comments were solicited for all four items. Items (3) and (4) also asked the teacher to group the pupils in one of five categories -- greatly exceeded expectations, exceeded expectations, met expectations, fell below expectations, and fell far below expectations. For items (2) and (3) in Form A, and (3) and (4) in Form B, comments were invited and pupils were first rated on the five-point scales as indicated, before being ranked within those scales.

e. Teacher Pre-instructional Interviews I and II. Where possible, each teacher was video-taped on two occasions, once while teaching Language Arts and once while teaching Mathematics. Each video-taping session lasted for about 40 minutes. The video-taping equipment was operated by the regular classroom observers, and followed a camera familiarization period with the class. The Pre-instructional Interviews preceded each video-taped lesson and focused on the teacher's goals and plans for the lesson.

f. Stimulated Recall Interviews I and II. Following the procedures described in e. above (i.e., after the video-taped lessons), the taped lessons were played back to the teacher and the teacher was asked to describe fully his/her introspective thoughts at the time of instruction, and the sources of those thoughts, especially at decision or choice points in the lesson (Morine, 1976).

g. Teacher Sort Tasks I, II, III, and IV. On four separate occasions, each teacher was asked to think of ways of assigning pupils to groups in the lesson (Mathematics or Language Arts) that had previously been taught. The teachers chose their own grounds for the groupings and explained their rationale (Morine, 1976). On occasions III and IV the Sort Tasks followed the two video-taped lessons.

5. Socio-emotional climate. The classmates and the homeroom teacher largely determined the classroom climate for each case study pupil. Since all pupil measures used in this study, except for the Shadow Study procedures, were obtained for all pupils, these data are summarized and presented as contextual information. The pupil measures referred to will be dealt with in other sections of this chapter.

Information concerning each teacher's personality, attitudes, and beliefs was collected using the instruments described below and is tabulated in Appendix I.

a. High Inference Rating Scales (HIRS). The HIRS were used to provide classroom observation ratings of the teacher on eight separate variables. Four of these variables were extracted from Kounin's (1970) work and deal with classroom management skills, they are (see Appendix F):

   i. Withitness -- the ability to communicate to pupils awareness of what is going on in the classroom.

   ii. Overlappingness -- the ability to deal simultaneously with more than one matter in the classroom.

   iii. Smoothness -- the ability to maintain the on-going flow of academic events without giving attention to self-initiated intrusions.

   iv. Momentum -- the ability to maintain the pace of the lesson without overdwelling on or fragmenting a topic.

Two more variables are related to the teacher's instructional skills, they are:

v. Clarity -- the ability of the teacher to answer questions or explain material to a class in a manner which results in the students' ready and evident understanding (Emmer, 1972).

vi. Persuasiveness -- the ability of the teacher to motivate pupils to perform appropriate tasks through being socially influential and powerfully persuasive (Truax, Fine, Moraver, and Millis, 1968).

Finally, two variables are related to the teacher's interpersonal skills in the classroom, they are:

vii. Warmth -- the teacher exhibits a deep caring, prizing, and valuing of each student, and this attitude is made clear to the student (Truax, 1971).

viii. Empathy -- the teacher's responses to pupils add significantly to the feeling and meaning of pupils' expressions (Carkhuff, 1969).

Three investigators were especially trained as raters for the HIRS. During training using live coding situations prior to the conduct of this study, these raters achieved 80 percent agreement (range = 50 to 100 percent) or better on 65 percent of all trials on all scales (N = 40). On inter-rater reliability checks during the study, the raters achieved 80 percent agreement(range = 55 to 100 percent) on 76 percent of all trials on all scales (N = 67).

b. This I Believe Test (TIBT). This test is was developed for the purpose of classifying individuals according to belief systems ranging from concrete to abstract (Harvey, Prather, White, Alder, and Hoffmeister, 1966). In this test subjects are required to respond to a number of socially and personally based referents by completing statements which begin with "This I believe about ...." The authors of the test claim that respondents may be classified as belonging to one of four principal belief systems, based upon the degree of absolutism, tautologicalness, novelty, evaluativeness, and simplicity-complexity of their completions (Harvey et al., 1966:374). Descriptions of the four belief systems and seven auxiliary dimensions are presented in Appendix G.

According to Harvey (1970), teachers' beliefs strongly influence the manner in which they interact with children. An examination of responses to the tests reveals such respondent characteristics as accuracy and flexibility of perception, degree of evaluativeness with pejorative implications, tendency toward defensiveness, and degree of openness. Harvey (1975) reports that the test has been used in "well over 100 studies ... and has been found to yield consistently valid outcomes." The reported interjudge reliability for trained readers is .91 (Harvey, 1975).

c. Minnesota Teacher Attitude Inventory (MTAI). The MTAI was designed to:

> Measure those attitudes of a teacher which predict how well he will get along with pupils in interpersonal relationships, and indirectly how well satisfied he will be with teaching as a vocation (Cook, Leeds, and Callis, 1951:3).

For the purposes of measuring those attitudes which predict success in establishing rapport with students, Cronbach (Buros, 1953) reported validity coefficients of .60, .63, and .46 based upon three separate studies. Cronbach also reported a split-half reliability of .93.

d. Sixteen Personality Factor Questionnaire (16PF). The 16PF was developed to provide "the most complete coverage of personality possible in a brief time" (Cattell, 1972:5). It purports to measure 16 functionally independent and psychologically meaningful dimensions of personality (see Appendix H). The 16PF is generally held to be one of the best measures of personality presently available (Adcock, 1959:196-199; Lorr, 1965:368); and Rorer, 1972:333). Dependability coefficients for the questionnaire range from .65 to .93 with 80 percent about .80. Stability coefficients range from .63 to .88 with 90 percent above .70 (Cattell, 1972). The manual reports construct validity coefficients of .53 to .94 with 70 percent over .70. The administration of combined Forms A and B confirms both reliability and validity for the questionnaire, and this procedure was followed in this study.

## Operator Data -- Pupil Measures

The data sources described in this section, with the exception of the interview, apply essentially to all pupils in the combined study. Gathering data on all pupils permitted a detailed analysis of the six pupils selected for individual case studies, and also made provision for a contextual backdrop for each case study pupil.

The particular distinction of operator data is that the data are generated as a result of the intervention of external agents -- in this case, the six investigators involved in the combined study. Operator data do not reflect naturally occurring events, but are generated through such "artificial" measures as pencil and paper tests, questionnaires, and interviews. Thus, operator data inquiry methods necessarily place certain restrictions on the nature and quality of the information supplied by respondents.

1. Pupil Interview. According to Yarrow (1960), "The interview is a technique particularly well adapted to uncovering subjective definitions of experiences, to assessing a child's perceptions of the significant people and events in his environment, and to studying how he conceptualizes his life expectancies." Interviews may vary in their purpose and structure. This interview was semi-structured, with the purpose of obtaining information from the child, much as Yarrow has outlined above.

Interviews were conducted with only the six case study children. Whenever possible, the interviews were conducted following the Shadow Study observation. All interviews were held by the same investigator who had acted as the Shadow Study observer. These observers were also the same investigators who had acted as classroom observers and coders for the Coping Analysis Schedule for Educational Settings. As coders and data collectors, therefore, they had been almost daily visitors in the classrooms of the case study pupils for more than five weeks prior to conducting the Shadow Study and the subsequent interview. The interviewers were thus well known to their subjects, and had been very close observers of many aspects of pupil classroom behaviours.

Prior to the case study pupil interview, the three investigators who were to conduct interviews made practice observations and interviews in other school settings. After initial practices, each interviewer made audio-recordings of practice interviews which were then played back for critical comment from the other interviewers. Also, the interview structure and questions were repeatedly subjected to revision.

As part of the preliminary arrangements for this study, all parents were asked to complete written authorization for their children to take part in this study -- including being interviewed. Authorization was also requested of teachers. In total, authorization to conduct interviews was received for 155 of 159 pupils. All interviews were conducted in the children's own classrooms, once their parents had also been contacted by telephone immediately before the interview.

The interviews were semi-structured. They were designed to gather further contextual information concerning the classroom ecology, to help explicate behaviours and happenings which were recorded in the course of the Shadow Study observation, to provide specific information concerning the child, and to allow the child to express personal thoughts and feelings which might otherwise be kept hidden. A copy of the interview protocol is contained in Appendix E.

2. Sociometric status. The questions posed in this study ("Who would you like to sit near? Who would you like to work with? Who would you like to play with?") were suggested by Dinkmeyer (1965). Pupils were asked to supply three names from among their classmates, ranked in order of preference, for each of these questions.

The questions and test protocols were tried and modified in classes of a school not involved in this study prior to their being used here. As a result of these trials, grade one pupils were interviewed individually, giving their answers with the aid of class pictures (a method suggested by Brophy -- personal communication, March, 1976). Grades three and six pupils made written responses to the sociometric questions in a group setting, having first been assured of confidentiality. The names of all class members were placed on display in order to assist recall.

In this study the results of the sociometric tests were used to identify "best friends" as identified by the case study pupils, and to discover classmates who chose those particular pupils as friends.

3. Pupil Attributes. Parents, cumulative school records, and the results of standardized tests of intelligence were all regarded as sources of pupil attributes.

a. Parent Attitude Toward Education Scale (PATES). Although a full investigation of home factors was beyond the scope of this study, the investigators were conscious of the importance and possible significance of the home in the school life of the child. The PATES (Medinnus, 1962) contains 40 statements, each of which requires a response rated from "Strongly agree" to "Strongly disagree." According to Medinnus the questionnaire measures such parent attitudes as the value of personal educational experiences; willingness to support the school in matters of discipline, policy, administration, and finances; and the importance of education. The instrument has a reported split-half reliability correlation coefficient (Spearman-Brown) of .90.

In this study the PATES was used to provide some insight into parental support for the role of schools, and for the school achievement efforts of the six case study children.

In addition to the 40 original questions, the investigators added further items to the PATES. These were:

i. The extent of the formal education of the child's natural mother and natural father (based on a selection from eight responses ranging from "Not yet completed grade 10" to "Five years or more of college/university").

ii. The parents' perception of their child's ability when compared with other children of the same age (based on a five-point rating scale ranging from "Much better" to "Much worse").

iii. The parents' expectations for the extent of the formal education of their child (based on a selection from seven responses ranging from "Complete grade 10" to "Five years or more of college/university").

iv. The parents' estimate of the type of work or job title which their child would ultimately reach. The response was invited as an open-ended statement.

b. School Records. The principal source of information for pupil demographic and school misdemeanour data was the Cumulative Guidance Folder used for all school pupils in Alberta. This folder is typically maintained by the school staff, is kept on the school premises, and accompanies children throughout their school education. The following are examples of the data included in the folder: age, birthplace, parents' occupations, family integrity, sibling position, truanting, discipline problems at school, and standardized test records. These data were particularly helpful in this study in providing contextual information for the case study subjects' home backgrounds, the socio-economic status of each class (see below), and the Metropolitan Achievement Test (for grades three and six) administered in the fall prior to this investigation.

The Blishen (1967) scale was applied to the reported occupation of parents. The underlying assumption of this scale is that "The family's social status is dependent upon the occupation of the husband rather than the wife when both are working" (p. 42). It is an index which is a combination of rankings in terms of education, income, and prestige. The index was constructed with a regression equation using the Pineo and Porter (1967) prestige scores assigned to 88 occupations as the dependent variable, and income and educational levels reported for these occupations in the 1961 Canadian census data as the independent variables. Regresssion weights were then applied to provide indices for 320 occupations identified on the basis of education and income from the census data (Blishen, 1970).

c. Intelligence and Readiness. Two generally recognized tests of intelligence and one of readiness were used in this study:

  i. The Peabody Picture Vocabulary Test (PPVT) is a 150-item scale "designed to provide an estimate of a subject's verbal intelligence through measuring ... hearing vocabulary" (Dunn, 1965). It is not a comprehensive measure of intellectual functioning, but provides information useful in predicting school success -- particularly in areas requiring verbal intelligence. Test scores are recorded variously as percentile ranks, mental ages, and intelligence test scores. A reliability coefficient of .67 is reported for alternate forms with six-year old children. The median congruent validity coefficient for mental ages with those of the 1960 Stanford-Binet test is .83. The corresponding figures for intelligence quotient (IQ) scores with those of the WISC full scale, verbal scales, and performance scales are .61, .67, and .39 respectively.

  ii. The Canadian Lorge-Thorndike Intelligence Test

(CLT) is a timed test of abstract intelligence which has eight subtests (Lorge, Thorndike, Hagen, and Wright, 1967). The authors claim that the test measures a student's ability to work with ideas, generally accomplished in adult life through the use of verbal symbols. Each student completing the test is provided with verbal and nonverbal scores expressed in differential IQs, age equivalents, grade equivalents, and grade percentiles, as well as a differential IQ score for the total test. The verbal subtest has reported split-half reliability coefficients of .945 (grade three level) and .911 (grade six level), and .931 and .911 respectively for the nonverbal subtest. The correlation between verbal and nonverbal scores is reported to be .681 (grade three level) and .612 (grade six level).

iii. The Metropolitan Readiness Test (MRT). The MRT measures the extent to which school beginners have developed in the several skills and abilities that contribute to readiness for first year instruction at school (Hildreth, Griffiths, and McGauvran, 1969). The MRT contains six subtests: Word meaning, Listening, Matching, Alphabet, Numbers, and Copying. According to the authors, content validity is based upon a review of the literature, research, and their own professional judgement. The subtests correlate between .36 and .64. Construct validity is based upon the following correlations with other readiness and intelligence tests: Murphy-Durell, $\underline{r}$ = .80; Pinter-Cunningham PMA Test, $\underline{r}$ = .76; Otis-Lennon, $\underline{r}$ = .67 to .72; Goodenough-Harris Drawing Test, $\underline{r}$ = .41. Predictive validity of the MRT is compared with the SAT Primary I Test (given seven to eight months later), $\underline{r}$ = .57 to .67.

4. Abilities and Achievements. The actual abilities and achievements of pupils were recorded by two principal means -- the official school district School Progress Report card, and the Metropolitan Achievement Test (for grades three and six).

a. School Progress Report. The report card contained information which was provided by the child's teacher or teachers. The information included the pupil's school attendance record, the teacher's assessment of "effort" and "achievement" for each subject in the curriculum, and the teacher's assessment of the pupil's performance as a group member (four subskills), as an individual (four subskills), and as a worker (three component skills). Anecdotal comments frequently accompanied each subject assessment. Assessments were usually entered into the report cards in January, April, and June of each year. (A November report to parents was usually made via individual parent-teacher conferences.)

In this study the teacher report card assessments were regarded as important data which measured the degree to which each pupil achieved based on the teacher's criteria (as distinct from achievements such as those measured by standardized tests).

b. The Metropolitan Achievement Test (MAT). Primary I (Form F), Elementary (Form F), and Intermediate (Form G) partial batteries of the MAT were administered to grades one, three, and six pupils respectively. The MAT is a continuous measurement of pupil progress from kindergarten through grade nine, in subject-matter areas relevant to each grade level, providing a survey of a pupil's year-by-year progress and relative achievement in different subjects (Durost, Bixler, Wrightstone, Prescott, and Balow, 1971). The authors report Spearman-Brown split-half reliability coefficients ranging from .88 to .96, and Kuder-Richardson Formula 20 reliability estimates of .91 to .97 for the subtests used in this study. The MAT yields standard scores, grade equivalents, percentile ranks, and stanines.

5. Attitudes. Pupil attitudes toward various aspects of school, home, and themselves were measured using the five instruments described below, and briefly outlined in Table 2.

a. Oral (OSAT) and Written (WSAT) versions of the School Attitude Test (Rivera, 1973) were used for grade one and grades three and six respectively. According to McCallon

| Instrument and factors | No. of items | Example of item statements or questions | Example/type of response | Scoring | Comment |
|---|---|---|---|---|---|
| OSAT: | 29 | | | | |
| 1. interpersonal relationships | 3 | How is everybody with you in school? | Response options are four faces depicting various emotions. | From 1 (most negative) to 4 (most positive) | Used for grades 1 and 3 |
| 2. student-instruction interaction | 21 | How do your teachers feel when they help you? | | | |
| 3. general school factor | 5 | How are you in school? | | | |
| WSAT: | 46 | | Select one of: | Generally: | Used for grade 6 only |
| 1. interpersonal relations | 9 | I like my school friends. | 1. most of the time | 1 (most negative) to 3 (most positive) | |
| 2. student-instruction interaction | 26 | My teachers are friendly. | 2. some of the time | | |
| 3. general school factor | 11 | My school is a happy place to be. | 3. not very often | | |
| MCI: | 45 | | Select one of 'Yes' or 'No' to show agreement with statement. N.B. high score indicates high agreement, not necessarily positive attitudes. | 'No' = 1<br>'Yes' = 3 | Used for all grades |
| 1. satisfaction with the class | 9 | Most children say the class is fun. | | | |
| 2. friction among class members | 9 | Some pupils don't like other pupils. | | | |
| 3. competitiveness among class members | 9 | Most children don't care who finishes first. | | | |
| 4. difficulty of schoolwork | 9 | Children often find their work hard. | | | |
| 5. cohesiveness among classmates | 9 | All of the children know each other well. | | | |
| SEI: | 50 | | Select one of: | Score: | Used for all grades |
| 1. general self-esteem | 26 | I wish I were younger. | 1. not like me | 0 (unlike me) | |
| 2. social self-esteem (peers) | 8 | I'm easy to like | 2. like me | 2 (like me) | |
| 3. home self-esteem (parents) | 8 | I get upset easily at home. | | | |
| 4. school self-esteem (academic) | 8 | I'm proud of my schoolwork. | | | |
| PCAS: | 64 | | Select one of, for example: | Score varies, usually 0 for less positive or negative responses, 1 or 2 for positive responses. | Used for grades 3 and 6. |
| 1. attitude to school | 6 | School is fun. | 1. yes, often | | |
| 2. interest in schoolwork | 6 | School lessons are boring. | 2. sometimes | | |
| 3. importance of doing well at school | 5 | I work and try very hard in school. | 3. never | | |
| 4. attitude to class | 8 | I hate being in class I'm in now. | or | | |
| 5. "other" image of class | 6 | Other children make fun of my class. | 1. yes | | |
| 6. conforming vs. nonconforming pupil | 5 | It's nice to fool about in class. | 2. not sure | | |
| 7. relationship with teacher | 6 | Teacher gets on well with me | 3. no | | |
| 8. anxiety in classroom situation | 7 | School work worries me. | | | |
| 9. social adjustment (classmates) | 4 | I have no one to play with at recess. | | | |
| 10. academic self-image | 9 | I'm useless at schoolwork. | | | |

Note:
OSAT = Oral School Attitude Test
WSAT = Written School Attitude Test
MCI = My Class Inventory
SEI = Self-Esteem Inventory
PCAS = Primary Children's Attitude Scale

Table 2

Selected Items from Five Measures of Pupil Attitudes used in the Westham study

(1973:4), author of the WSAT (derived from the oral version), the instrument measures the pupil's perception of the school environment and "is based upon how the student feels about school in general, and how he feels about his interaction with various components of the school environment." The OSAT has a reported (Buros, 1974) test-retest reliability coefficient of .77 over 10 days with a sample of 50 kindergarten to grade three pupils. The WSAT has a reported (Buros, 1974) test-retest reliability coefficient of .78 over 14 days with 120 grades four and five pupils. Validity is argued on the basis of previous research and the selection of items which appeared to teachers as having content validity relating to specific domains of the school environment (e.g., teacher, principal, peers).

b. The My Class Inventory (MCI). The MCI (Anderson and Cayne, 1969) was administered to all pupils at all grade levels. It assesses:

> Classroom social climate ... includes a profile of measurable class group properties that have significance for research on classes as social groups. These properties include interpersonal relationships among pupils, relationships between pupils and their teacher, relationships between pupils and both the subject studied and the method of learning, and finally, pupils' perceptions of the structural characteristics of the class. (Anderson, 1973:1)

The reliability coefficients of the five factors on the MCI reportedly range from .54 to .77. The validity of each factor rests upon prior theoretical and research efforts in the development of an earlier instrument by Walberg and Anderson in 1967 titled Learning Environment Inventory.

c. The Self-Esteem Inventory (SEI). The SEI (Coopersmith, 1967) was designed for the individual assessment of pupils in finding out how they feel about themselves. According to the author, the SEI has a split-half coefficient ranging from .87 to .90, and test-retest reliability of .88. The instrument was administered to class groups at the grades three and six levels, but to small groups of grade one students in this study.

d. The Primary School Attitude Scales (PCAS). The PCAS (Barker Lunn, 1971) was administered only to grades three and six in this study. It measures pupil attitudes about aspects of school life, and comprises 10 factors. The original instrument, developed in Britain, was field-tested with Albertan children and adapted for use in this study in consultation with the author (personal communications). The factors are reported to have internal consistency (Cronbach's alpha coefficients) ranging from .58 to .91. Validity is derived from the internal structure of the instrument, the correlation of the different scales with other (presumably related) measures, and from expected group differences which were predicted on theoretical grounds from the findings of other researchers.

## Transducer Data

The data sources described in this section focus mainly on students in the classroom setting. Data concerning the six case study pupils have been stressed in this study, nevertheless data concerning the behaviours of other puils and teachers were also collected and are presented here when they appear to aid in the understanding of the case study pupils, or when they appear to provide useful contextual information.

Transducer data are distinguished from other data sources in that they present a record of naturally occurring behaviours (i.e., behaviours which are not in response to artificially applied stimuli such as the use of research questionnaires and interviews). Transducer recording methods provide unique data which have a distinct value -- they also serve in the data verification process of "triangulation" when used in conjunction with other types of data.

In obtaining transducer data via the use of classroom observers there is the danger of reactive effects. Such effects were guarded against through inserting a period of familiarization (see section titled Procedures, p. 78) prior to the collection of data. Also, the six investigators took pains to maintain their roles as non-participant observers, although responding to natural social acts on the part of teachers and pupils. Repeatedly during the data collection and school visitation stages of the investigation, the researchers were assured by principals and teachers of the effectiveness of their efforts not to generate reactive effects. A brief description of the background and experience of each of the investigators is contained in Appendix K.

In this study pupil behaviours were recorded and measured using the four systems or instruments of data collection outlined below.

1. The Coping Analysis Schedule for Educational Settings (CASES). The classroom behaviours of children were recorded using the CASES instrument (Spaulding, 1966 -- revised by Spaulding and Papageorgiou, 1975). This instrument:

> Was developed over a period of approximately seven years as a result of more than 2,000 case studies of normal children in on-going public school classrooms, Head Start centers, and other educational settings. Its categories are based on ego-theory and reflect a number of dimensions of personality development ... Basic to its development were the concepts of 'integrative' and 'dominative' social behaviour as delineated in the work of H.H. Anderson (1939, 1943). In addition to the generally 'active' and 'passive' styles of child response to environmental stimuli, CASES includes categories which reflect 'overt aggression,' 'passive aggression,' 'independence,' 'autonomy,' 'dependence,' 'avoidance,' and 'withdrawal'. (Spaulding and Papageorgiou, 1975:1)

Using the CASES, student behaviour is coded in one of 13 categories, six of which are subdivided into appropriate and inappropriate aspects of the same behaviour for a total of 19 categories (see Appendix B). The teacher's expectations determine the appropriateness of a setting. All but one of the categories reflect the pupil's economy with the external environment, which is considered to be:

> Of crucial importance in the development of his social relations and, ultimately, his overall cultural adequacy .... CASES provides a comprehensive technique of characterizing overt coping behaviour in the classroom (p. 2).

By grouping together various of the 19 behaviour categories, eight "coping styles" are arrived at. These styles of behaviour are based upon personality development theory and are as follows:

Style A: Dominative, active aggressive, annoying, and manipulating

Style B: Resistant, passive aggressive, delaying, and peer-oriented

Style C: Passive, withdrawn, avoidant, and dreamy

Style D: Peer-dependent, distractible, and off-task

Style E: Attentive, adult-oriented, and compliant

Style F: Assertive, social-integrative, and task-oriented

Style G: Appropriately task-oriented, independent, and self-motivated

Style H: Conforming, passive, and submissive to directions.

Styles of behaviour become readily visible once the frequency of their occurrence passes a certain threshold which was empirically developed by Spaulding. The visibility thresholds for each style have been established at a coefficient of 1.00, representing a point one standard deviation above the mean obtained for each style in a sample of approximately 2,700 students in grades one through 12.

Spaulding reports readily achieving inter-rater reliability ranging from mid .80 to mid .90. "Construct validity is suggested by the ease with which teachers and others familiar with child development and personality theory have obtained reliability of observation and recording" (p. 2).

In this investigation the CASES coding was accomplished by three of the researchers who were specially trained in the use of the CASES instrument. Prior to the commencement of this study, these three coders attained an average inter-rater reliability (percentage agreement) of 88.77 using a training video-taped classroom recording. After further training, inter-rater reliability (for pairs of observers) in live settings ranged from 31.82 to 92.00 percent, with a mean of 65.61 percent. When calculated among the three coders, the mean value was 78.28 percent. Further inter-rater reliability checks were made during the data-collection phase of the study, resulting in an average agreement of 77.22 percent when live coding, and 89.95 when using the training video-taped lesson.

Since the interpretation of children's classroom behaviours is largely dependent upon the teacher's expectations, the proper coding of pupil behaviours via the CASES instrument requires an understanding of the teacher's classroom modus operandi and intent. Based on this information, classroom settings are classified as either teacher-directed (TD) or non-teacher directed (NTD) and behaviours are coded accordingly.

2. The Expanded Brophy-Good Teacher-Pupil Dyadic Interaction Classroom Observation System (DICOS). The DICOS is a comprehensive, low-inference classroom observation instrument developed by Brophy and Evertson,(1973) from an earlier system developed by Brophy and Good, (1969). This system captures the naturally occurring sequences teacher-student (dyadic) verbal exchanges in elementary school classrooms. It codes whether the interactions were public (open to and possibly involving the whole class), or private (interaction restricted to one pupil and the teacher).

The DICOS is based upon real and psychologically meaningful units of classroom interaction. It measures 96 variables grouped into two teacher-afforded categories (public response opportunities and dyadic contacts), and two student-initiated categories (questions/comments and dyadic contacts).

Two modifications were made to the system for the purposes of this study. Two more categories were added to the ten that already existed for teacher feedback reaction in academic response opportunities, these are:

i. affirmative teacher reaction (AFFIRMS), and

ii. repeats student statement (REP SS).

The complete set of categories is contained in Appendix C.

The authors report that trained coders may reach an 80 percent agreement criterion. For this investigation three researchers were specially trained as DICOS coders. During training prior to the investigation the percent reliability for pairs of coders ranged from 31 to 100 percent, with 20 of 36 checks showing 79 percent or better agreement. During the data collection stage of the study a total of 65 checks was made on various of the DICOS variables, resulting in 27 checks showing 79 percent or better agreement. This degree of intercoder reliability compares favourably with reliability measures reported by Brophy and Evertson, 1973.

3. Anecdotal Notes. The combined large study of which this study is one part involved six investigators in the collection of field data. Since six classrooms and their inhabitants formed the focus of the investigation, each of the investigators was assigned the role of special liaison person and observer for one classroom. One of the functions of the special liaison role was to supply detailed information concerning each classroom environment (see Classrooms, p. 50).

Each investigator wrote a daily diary of classroom events -- this was in addition to the coding and other duties which investigators were performing. The investigators were encouraged to be reactive, interpretive, and evaluative in their anecdotal comments, and to record incidents and events which other coding instruments might not capture.

Besides being assigned to one classroom, each investigator was assigned to observe and code mainly at one grade level. Thus, each investigator was a frequent visitor to both schools in the study, visiting one of the grades one, three, or six classrooms in each school. Anecdotal records were also kept by each investigator of the second classroom visited.

No attempt was made to train the investigators for the particular role of writing Anecdotal Notes. The reliability of the notes rests upon the apparent agreement between the observations contained in the pairs of notes, and in the agreement of the notes with various aspects of other instruments, The validity of the notes rests upon the experience and background of each of the observers (see Appendix K), including the special training which each had received in preparation for coding the various instruments used in this study.

For purposes of reference throughout this report, each teacher is identified by a letter -- A, B, C, D, E, F. The classroom primary observer is identified by the figure 1, the secondary observer by the figure 2.

4. The Shadow Study. The Shadow Study method of investigation, as developed for use in this study, uniquely combined elements from the work of other authors. The Shadow Study is essentially an unobtrusive, non-participant, detailed observation of an individual over an extended period of time. It is a method of investigation which has been used effectively in both comparatively large-scale (Lounsbury and Marani, 1964)

and small-scale (Burnham, 1970) studies, and which draws significantly from the work of Barker and Wright (1951) and Wright (1960).

In this study, three of the investigators adopted the role of Shadow Study observer. Each Shadow Study observer was assigned to select randomly and observe one student from each of the two classrooms for which he was already the primary or secondary observer (as noted above for Anecdotal Notes). Having selected an eligible (see The Sample, p.47) pupil as subject, the observer then remained close to that pupil throughout the whole of one school day.

a. Narrative account of behaviour setting. Using a specially prepared coding and observation record sheet (see Appendix D), the observer recorded narrative accounts of the various behaviour settings as they existed on every tenth minute throughout the Shadow Study day. The narrative accounts included the physical and social environments, the activity (e.g., lesson topic) on which all behaviours of inhabitants were focused, the general behaviours of the inhabitants, and any unusual items of apparent significance.

b. Mapping of movements. The observer's recording sheet contained a map of the physical environment of the behaviour setting. Following the writing of the narrative account and using a "picture flash" technique, the observer marked the location of the classroom inhabitants on the map, paying particular attention to the locations of the subject pupil and the teacher. When mapping locations and movements of individuals, symbols were used to denote whether each inhabitant was sitting (on floor or at desk), standing, kneeling, lying (on floor), or walking.

c. Specimen Description of pupil behaviour. Midway between the Narrative Accounts, and also on every tenth minute throughout the Shadow Study day, the observer wrote a detailed Specimen Description of the behaviour of the subject pupil over a 60-second period. As well as recording the location and body position and movements of the subject, the observer recorded social and verbal behaviours. The observer was also encouraged to make interpretive comments.

d. Shadow Study summary. At the end of the Shadow Study day the observer conducted an interview with the subject pupil (see Pupil Interview, p.58). Following the interview the observer wrote a summary of his observations and feelings concerning the whole Shadow Study experience. Observers were encouraged to be reflective, interpretive, and evaluative.

Measures of reliability and validity were difficult to arrive at for this method of data collection. To enhance reliability, prior to this investigation the three Shadow Study observers used classrooms in other schools where they were familiar figures in order to practice their observational skills. These individual practices were followed by observations where all three observers shadowed the same pupil simultaneously. These practices were followed by the comparison of observers' notes and discussion to improve reliability.

The arguments for validity of the observations rests upon the background and experience of each observer (see Appendix K ), and the fact of each of the Shadow Study observers having been trained specifically to use the CASES instrument (see The Coping Analysis Schedule for Educational Settings, p. 71). Also, prior to conducting the Shadow Study for a period of five weeks, each observer had been an almost daily visitor to each classroom observed, and each visit typically lasted for one whole morning or one whole afternoon of instruction. During this time the observers had been recording Anecdotal Notes (see p. 74).

## Procedures

The large, combined research project of which this study is a part contained three phases as outlined below and illustrated in Figure 4.

### Phase 1. Preparation

Instruments were selected and adapted where necessary, and the investigators began training procedures as coders. Fasano, Mahen, and Moody were assigned to the CASES and Shadow Study instruments, and the Pupil Interviews. Eggert, Marland, and Muttart were assigned to the DICOS and High Inference Rating Scales, and the Teacher Interviews. Two schools not involved in the actual research project were used for training purposes.

### Phase 2. Familiarisation

In order to reduce reactive effects, the six investigators spent one week visiting the schools, spending several hours each day in the

| Phase | Month | Procedures |
|---|---|---|
| 1<br>TRAINING | APRIL | Training with manuals, lesson transcripts, and videotapes. Instrument modifications. |
| | | Live coding practices, reliability checks, further modifications to instruments |
| 2<br>FAMILIAR-IZATION | MAY | Jamieson School: A. gr. 1, B. gr. 3, C. gr. 6<br>Napier School: D. gr. 1, E. gr. 3, F. gr. 6 |
| | | Investigators alternate between their two assigned classrooms, gathering contextual data, practice coding, establishing presence. |
| 3<br>DATA COLLECTION | | Live coding for CASES, DICOS, and HIRS.<br>Videotaping for teacher stimulated recall<br>Some teacher interviews |
| | JUNE | Pupil testing<br>Teacher interviews |
| | | Pupil testing<br>Shadow Studies and Pupil Interviews |
| | | Collection of Cumulative Record Card and Report Card data<br>Re-testing |
| | | Class and staff parties in each participating school |

Figure 4. Summary of the phases and research activities of the investigation.

classrooms to which they had been especially assigned. The investigators, one from each of the groups listed in Phase 1 above, were paired and assigned to one grade level. Each partnership was then responsible for collecting the observational and interview data for one class in each of the two schools, at the same grade level.

During this phase the investigators were introduced to the pupils as visitors who were interested in schools and classrooms. Every effort was made to ensure that pupils did not identify the investigators with authority figures in the classroom, school, or school system. The investigators became familiar with classroom routines and teacher practices. They also learned the name and identity of each class member, to aid note-taking and coding. They practised the use of the instruments and began recording Anecdotal Notes.

## Phase 3. Data Collection

### a. Contextual data

Data collected by all six investigators were useful in several areas of contextual descriptions, nevertheless there were specific assignments as noted below.

- Community data were collected during and following the in-school period (Moody).
- Two investigators (Fasano -- Napier school, and Moody -- Jamieson school) were assigned to interview the principals, attend staff meetings, and gather school contextual information.
- Each investigator was assigned to one classroom: Marland, Moody, and Mahen, to grades one, three, and six respectively

in Jamieson school; and Fasano, Eggert, and Muttart to grades one, three, and six respectively in Napier school. Responsibilities included teacher liaison, Anecdotal Notes, initial classroom maps, and the collection of all existing pupil recorded data from the school and classroom files.

Teacher interviews, demographic data, and styles were the responsibility of Eggert, Marland, and Muttart. Video cameras for taped lessons were operated by Fasano, Mahen, and Moody.

b. Operator data

The pupil sociometric status, attributes, abilities and achievements, and attitudes instruments were administered by each pair of investigators once live coding for transducer data (the Shadow Study excepted) had been completed. The testing was arranged in cooperation with and on the advice of the classroom teachers, although teachers did not take part in proctoring the attitude tests.

The Subject Pupil Interview was conducted immediately following the Shadow Study.

c. Transducer data

The Anecdotal Notes were recorded by each investigator on a daily basis from the date of first entering the schools until data collection visits to the schools were completed -- a period of approximately six weeks.

The Shadow Study observations were conducted by Fasano (grade one), Moody (grade three), and Mahen (grade six) in both schools. These same observers also conducted the Pupil Interviews. The Shadow Studies were carried out in the first week following the live coding.

The CASES and DICOS observations were conducted during the live coding period immediately following the week of familiarization. Coding was restricted to language arts and mathematics lessons in grades one and three, to language arts and social studies in one grade six class, and to language arts only in the second grade six class. (The added restrictions at the grade six level were a result of platooning, and observations could only be made of the six teachers directly involved in this investigation.) Language arts and mathematics were selected for live coding because they are usually regarded as constituting the core curriculum for elementary schools.

## Data Analysis

Because this study was part of a larger investigation involving other researchers using essentially the same data base, it was possible to take advantage of treatments accorded the data by those researchers. Where appropriate, the reader will be referred to other reports of this investigation for more detailed information concerning the analysis of data. For a table summarizing case study pupil and class mean scores on all measures, see Appendix A.

### 1. Contextual Data

In general, contextual data are presented in a descriptive format in order that people and events may be seen in their natural contexts. Graphic representation has been used to illustrate the data collected concerning the physical environments of the schools and classrooms.

In analysing data concerning the socio-emotional climate of the six classrooms, the pupils were treated separately from the teachers.

All operator data and the CASES and DICOS data were collected on all pupils and examined in class sets. For each class, mean scores and standard deviations were derived in order to clarify the nature of each class. In addition, apparently dominant class responses or behaviours on individual items of the instruments were selected and are presented in the text in Chapter IV. Finally, the apparently significant behaviours or attitudes of individual students were also selected and are presented in the text.

The data concerning teacher personalities and styles (HIRS, TIBT, MTAI, and 16PF) are presented in numerical form in accordance with the appropriate scoring instructions for each instrument. In addition, the teachers' verbal responses on individual items of the TIBT are examined in the text. Tables containing the teachers' scores on these four instruments are in Appendix I.

Teachers' attitudes toward case study pupils on various measures were rated and are presented in table form. Also, teachers' verbalized attitudes toward pupils gleaned from the Teacher Interviews are includded in the text. Teachers' perceptions of pupils' academic abilities are presented as class rankings.

2. Operator Data

The general procedures which have been followed concerning the analysis and presentation of all operator data (except the Pupil Interview) for the six case study pupils are as follows:

- all data were collected and scored in accordance with the scoring instructions for each instrument
- class means and standard deviations were derived for all

measures (including the factor and total instrument scores where appropriate)

- the factor and total instrument scores of the six case study pupils, together with the corresponding class mean scores and standard deviations, are presented in table form in the text (and summarized in Appendix A).
- for each case study pupil, single items of special pertinence were extracted from the various instruments for more detailed examination in the text.

The exceptions to this general analysis of operator data were as follows:

- the Pupil Interview was tape recorded and transcribed. The transcriptions were examined for sociometric data, and these data are included in tables presented in Chapter IV. The transcriptions were also examined for information concerning such matters as pupil attitudes and these are presented and discussed in the text
- some information obtained from the Parent Questionnaires was not appropriate for statistical analysis and is presented in the text
- some information concerning pupils obtained from the Pupil Report Cards was in the form of written comments, and this is presented in the text. Teacher evaluations of pupils' "effort" and "achievement" in school subjects were accorded a numercial value ("Commendable" = 4, "Very Good = 3, "Satisfactory" = 2, and "Needs to Improve" = 1) and are presented as

scores for the individual case study pupils (together with class means and standard deviations) in tables.

3. Transducer Data

The CASES data were treated in the same manner as described above for Operator Data. The CASES data are presented in tables in Chapter IV. (See Mahen, 1977, for fuller details concerning this aspect of the large study.)

The DICOS data were similarly treated and recorded in specially prepared figures in Chapter IV. The emphasis in analysing and presenting the DICOS data was on the interactions between each case study pupil and the appropriate teacher. (See Eggert, 1977, for fuller details concerning this aspect of the large study.)

The Anecdotal Notes were repeatedly examined for information which might assist in enriching the contextual descriptions and in the process of triangulation.

The Shadow Study data were variously analysed as follows:

- the locations and movements of students and teachers were tabulated and are summarized and presented in both figures and tables in Chapter IV.
- the behaviour setting descriptions were examined for contextual information in helping to understand the behaviours of pupils and teachers.
- the specimen descriptions of pupil behaviours were examined for significant pupil behaviours which are compared in the text with data from the CASES instrument and Anecdotal Notes. Also, information concerning the social contacts of the six

case study pupils was extracted for presentation in table form in Chapter IV and discussion in the text. Finally, the specimen descriptions were analysed using the broad CASES classifications of behaviours as "desirable," "inappropriate," or "unacceptable" (Spaulding and Papageorgiou, 1975). These data are presented in tables in Chapter IV and compared with the regularly coded CASES data.

## Summary

This chapter has presented information concerning the design, sample, data sources, investigation procedures, and data analysis involved in this study. The next chapter will combine the presentation, analysis, and discussion of the results of the investigation.

For ease of reference, the acronyms and initials employed in this study to denote the various instruments used in the study are listed below.

| | |
|---|---|
| CASES | -- Coping Analysis Schedule for Educational Settings |
| CLT | -- Canadian Lorge-Thorndike Test of Intelligence |
| DICOS | -- Expanded Brophy-Good Teacher-Pupil Dyadic Interaction Classroom Observation System |
| HIRS | -- High Inference Rating Scales |
| MAT | -- Metropolitan Achievement Test |
| MCI | -- My Class Inventory |
| MRT | -- Metropolitan Readiness Test |
| MTAI | -- Minnesota Teacher Attitude Inventory |
| OSAT | -- Oral School Attitude Test |

PATES -- Parent Attitude Toward Education Scale

PCAS -- Primary Children's Attitude Scales

PPVT -- Peabody Picture Vocabulary Test

SEI -- Self Esteem Inventory

16 PF -- Sixteen Personality Factor Questionnaire

TIBT -- This I Believe Test

WSAT -- Written School Attitude Test

## Chapter IV

# RESULTS AND DISCUSSION

## Introduction

The presentation and discussion of the data are briefly described immediately below. Some of the data are applicable to all pupils in the study (e.g., a description of the community), other data apply to only some of the pupils (e.g., descriptions of the schools), and yet other data are discrete to each individual pupil. The following format will guide the organization of this chapter.

First, the community of Westham is described since it was the setting for both schools and all six pupils. Second, Jamieson school is described, followed by presentations and discussions concerning the three subject pupils in that school. Third, Napier school and its three pupils are presented.

For each of the six subject pupils, the classroom and class teacher are described in detail since they represent important contextual information. Next, the class setting of each subject pupil is described under each of the four headings: Influence of the home and attitudes towards school; the social setting; academic attributes, abilities, and achievements; and classroom coping behaviour. Each of the six pupil case studies is concluded with a discussion of the pupil and the factors which seem to be salient in the pupil's classroom life.

This chapter is ended with a brief summary. Concluding statements concerning the six cases are included in Chapter V.

## The Community: Westham[a]

By most Albertan standards, Westham is a pleasant place in which to live. Its very foundation was based upon its picturesque location on a river in the heart of one of Alberta's parkland regions. It is strategically located on a major highway about 10 miles from a large urban centre, even so, Westham has the air and flavour of a small, prosperous, country town set in green, wooded, rolling countryside.

Over the last 30 years the whole of the province of Alberta has experienced rising fortunes based on the exploitation of its natural resources. Changes have been particularly noticeable in the large urban centres, with resultant influences on their satellite communities. More than most other townships in Alberta, Westham has experienced considerable growth and prosperity. Twenty-five years ago, Westham's population of over 1,100 was ably supported by the farming and limited oil and gas resources close to the town. But in those 25 years the population has increased to almost 24,000 and the base of employment has shifted to the large urban centre, whence 80 percent of Westham wage earners commute daily. Obviously, the tremendous population growth of Westham is accounted for by the migration of workers looking for cheaper housing and a more rural setting than offered by the large urban centre. This migration has resulted in Westham becoming essentially a dormitory town for the large urban centre.

Concomitant with the growth in population has been a growth in real income earned. In 1966 the gross annual income of the population was $18,000,000 or $1,832 per head; in 1976 the gross annual income was $185,000,000 or $7,359 per head. This relative affluence is evident in the large number of single family dwellings (800) and apartments (228). Most houses have been built in the past 10 years; they are well-kept, pleasant, permanent dwellings with neat and attractive gardens. The roads are paved, they are provided with side-walks, and many are tree-lined. There are several parks and naturally wooded areas within the overall park-like setting. There is a small amount of light industry, but this is restricted to two areas on the outskirts of the town. A large, modern hospital and a comprehensive health unit provide for the basic medical needs of Westham, and four churches of various denominations cater to the town's spiritual needs. Other major public services and buildings include the town hall, library, post office, community hall, and R.C.M.P. headquarters (acting as the local police force).

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[a] Although a fictitious name is used, much of the information contained in this section is derived from documents supplied by and personal discussion with the town's planning services department.

Mention was made earlier of the per capita income of Westham residents. It should be recognized that the per capita income is lower than it might be because of the comparatively large proportion of residents who are of pre-school or school-attendance age. Secondly, the town boasts of having a high portion of males who choose to work and a low portion of females who choose not to work. Although these two factors may seem to depress the comfortable income of Westham residents, they do support the concept of reasonably stable and intact family units, where mothers typically choose to be housewives and home-builders. A further supporting factor for this contention is the high proportion of householders who either own their homes or were in process of buying them: only 13 percent of dwelling units was listed as rental accommodation.

As is typical of communities in the province of Alberta, Westham's educational needs were supplied conjointly by two school systems serving over 6,000 children from grades one through 12. The school system in which this study was conducted enrolled over 4,000 children in four elementary schools and three secondary schools. The schools in Westham were a mixture of single-storey and two-storey buildings, but they were universally pleasant-looking, well-kept buildings, set in their own hard-top and grassed grounds. The buildings generally showed little sign of abuse and seemed to be treated with respect by the pupils.

In summary, Westham may be said to combine many of the advantages of large city and small town life; to provide for a pleasant, stable lifestyle; and to present a healthy environment for raising and educating children. Although the future promises continued growth on a grand scale, the town planners have proposals which will try to ensure the essential quality of life currently enjoyed by the residents, and to maintain the sense of stability in the community.

## The School: Jamieson Elementary

Jamieson Elementary School was a clean, inviting, single-storey building. Built of light-coloured brick, with windows on three sides, the school sat well back on a quiet, tree-lined, residential road. The school was fronted partly by well-trimmed lawns, and partly by the staff carpark. Hardtop playground extended along one side of the school, adjacent to the windowless, blank wall of the gymnasium. A grassed field stretched behind the school until it reached fences to one side and the rear; behind these fences were the gardens of single-family dwellings. The third side of the school field was adjacent to a large, open community playfield. The school field and community park appeared as one and provided children with a large, open playground, of which they took full advantage for games and activities of all kinds when not actually in the school building. The perimeter of the park was bounded by a wooden fence, which again provided the demarcation between field and home gardens.

Opened in 1975, Jamieson school had many of the desirable features of modern schools. It was compact, well-planned, carpeted, colourful, and well-lit (see Figure 5). Built originally as an eight-classroom school, a further eight classrooms in the form of portable structures had been added to one side of the school to cope with the increased pupil enrollment. School facilities included a large, well-equipped gymnasium; a large lunch-study room (which also did service for music lessons); a well-planned library; an infirmary or health room; a science room complete with sinks and other basic science instructional equipment; and an early childhood services room. The central administrative block of rooms had an easily accessible general office which led to offices for the principal and vice-principal. A special counsellor's office, a comfortably appointed staffroom, and a well-equipped staff work room were also included in the central block.

Classrooms and hallways were all carpeted and colour coordinated in pleasant pastel shades. A few professional paintings and several displays of children's art work were located along the hallway walls. The two classrooms which formed part of the centre block, having no windows looking to the outside, were each provided with two seven-feet high by 10-feet wide windows which looked into the hallway. The displays and hallway windows combined with the common practice of leaving

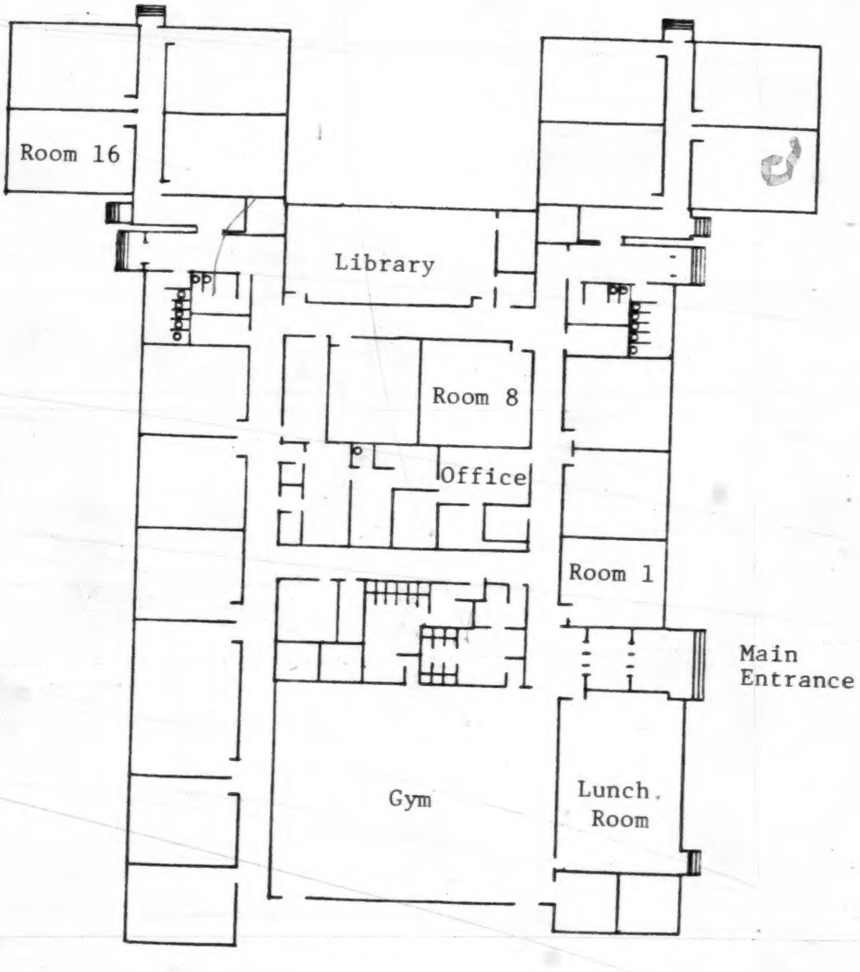

Room 16
Library
Room 8
Office
Room 1
Main Entrance
Gym
Lunch Room

Figure 5
Jamieson Elementary School Floor Plan

classroom doors open to give Jamieson school a sense of friendly purposefulness.

The school was led by a male principal and a female vice-principal. In addition, there were 18 female teachers, 3 male teachers, one female secretary, one male janitor, and two female part-time "school assistants". The school health nurse was a regular, day-long visitor on Mondays, and central office supervisors or clinicians in mathematics, science, guidance, and reading were all "on call" to the school. Among the Jamieson teachers were physical education and science specialists, and a librarian. The pupil population comprised 130 kindergarten children who attended on a half-day basis, and 390 children in grades one through six. There were two classes at each grade level, except for grades one and three (three classes each). Also, there was one split (grades one and two) class.

At the time of this investigation, there was no parent-teacher association at Jamieson school, although the principal had formed a parents' advisory committee. Upon being built, the school had been designated as a Community Core School, and the significance of this title and the accompanying role were topics for discussion at public meetings. A joint-use agreement was already in effect between the school and city authorities.

The principal had been appointed from an administrative position at a secondary school to the principalship of Jamieson school. He still seemed unsure concerning some of the specific curriculum details and pupil characteristics of elementary schools, but his leadership style enabled him to take advantage of the knowledge, experience, and professional concern of the teachers. Perhaps this style is best illustrated by the following comments taken from the notes of one of the investigators on the occasion of a staff meeting:

> The principal has a very low-key, almost deferential approach to conducting the meeting. The teachers interact freely. There is no formal procedure, nor does one seem necessary for business to be conducted in a profitable manner. Mr. N (one of the teachers) seemed to take charge in presenting several of the topics for discussion, especially items concerning the internal functioning of the school, and matters concerning the teachers' professional organization. --Note: he seems to be an opinion leader in a positive way, as does Mrs. H -- another teacher (Anecdotal Notes B, 1).

The Jamieson faculty was on the whole quite a young staff. This study was conducted at the end of the first year of operation of the school. The friendly spirit of cooperation among the teachers was, therefore, perhaps surprising and contributed much to the happy atmosphere of the school. The investigator's report of the staff meeting continues:

> Teachers take responsibility for making suggestions and recommendations, and for undertaking chores, etc. in a collegial way. The staff is supportive, friendly, and has common aims. The staff meeting was followed by a wine and cheese party at Mrs. O's nearby house -- Note: the investigator was invited to attend the party on separate occasions by two teachers and the principal, but found it necessary to decline (Anecdotal Notes B, 1).

But the concerns and professional involvement of the staff were more than parochial. Several teachers were members of such groups as the International Reading Association, a curriculum committee struck by the district central office, and the provincial association of teachers. Perhaps the most encouraging aspect of the faculty meeting was to be found in the suggestions for improving such items as pupil reports to parents for "next year" -- surely a very healthy sign in a newly-banded staff. Further evidence of "school spirit" was supplied on "T-shirt Day", when almost all pupils and faculty came to school in T-shirts bearing the school's logo.

Teachers may have found it difficult to obtain specific advice concerning their teaching assignments from the school administrators, on the other hand they were accorded considerable freedom in their timetabling and choice of learning activities and texts. Of course, advice was always available from colleagues as well as from district central office subject specialists. Except on some specific issues, the teachers at Jamieson seemed contented. As far as could be ascertained, school was not only a place where they worked but also a place where they enjoyed to work and enjoyed the companionship of their colleagues and, to a large extent, of their pupils.

The next three sections of this chapter contain description and discussion concerning the classroom, the teacher, the pupils, and a case study pupil in each of three classes at the grades one, three, and six levels.

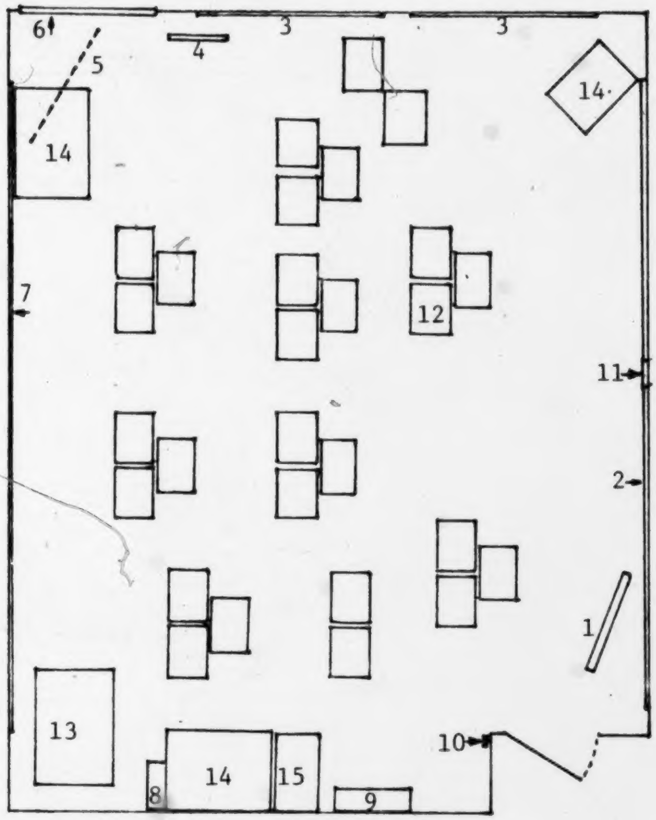
## The Grade One Classroom: Room 1

Ms. Thompson and her 27 grade one children occupied Room 1 in Jamieson School (see Figure 5, p.93), an "outside" room close to the main entrance to the school. Long windows about five feet in width looked out onto the quiet road which fronted the school. The room was not particularly notable, not for its design, nor equipment, nor decoration.

Room 1 (Figure 6) was quite pleasantly coloured with beige and off-white walls, and a complementing speckled dark-brown and yellow carpet. Twenty-seven individual desks were generally arranged in groups of three about the room. But there were times when the desks were arranged loosely in rows. Other furniture included three tables, two bookcases, a filing cabinet, and the teacher's desk and chair.

Instructional equipment included a green chalkboard which ran almost the length of the longest wall, and two cork tackboards which ran almost the length of two other walls. There were also a portable chalkboard and easel, a projection screen, a portable display chart frame, and commercially prepared "letters of the alphabet." Although the room did not have its own stock of audio-visual equipment and materials, these were readily available from the school's inventory. Ms. Thompson had prepared some learning aids herself, which were on permanent display: these included charts of numerals, letters, mathematics rules, homonyms, vowels, irregular words, compound words, geometric shapes, and words with "silent" letters.

Some materials on display had been produced by the grade one children. These included examples of "good work" in art, illustrated



KEY

1. Movable Chalkboard
2. Display Board
3. Tackboards
4. Chart Display Frame
5. Suspended Projection Screen
6. Window to Exterior
7. Chalkboard
8. & 9. Bookcases
10. Pencil Sharpener
11. Wall Clock
12. Individual Pupil Desks
13. Teacher's Desk
14. Tables
15. Filing Cabinets

Figure 6

Environmental Details of Room 1, Jamieson School

stories, paintings, illustrated poems, maps, and large paper flowers. Some of these display items were added and some were removed in the four-week observation period of this study. A booklet of antonyms was also on display, a result of the combined work of Ms. Thompson and her pupils. There was no evidence of learning stations as such, but one of the tables had been prepared as a natural science display and work area, with a magnifying glass, a magnet, and samples of seeds and insects.

There were no storage cupboards, nor were the pupils' desks equipped with storage space. All materials were either stacked on the floor, or on makeshift shelves of bricks and boards constructed by Ms. Thompson. Expendable materials supplied to the pupils included paper, paint, and glue. Although the room contained no resource books (e.g., dictionary and encyclopedias), these were available in the school library. Ms. Thompson stored and used several books in class sets: these included nine primary readers, and mathematics and science books. In addition, Ms. Thompson maintained her own collection of almost 100 books for the children to read.

The investigators found Room 1 to have a generally pleasant and comfortable atmosphere. The room was well lit for all classroom needs by flourescent lights. The room temperature did not present problems except later in the afternoons on particularly hot days. To some extent, extreme heat and stuffiness were avoided by having open windows, and by the children wearing very light clothes. (Typically, the girls wore blouses and short skirts or shorts, and the boys wore T-shirts or short-sleeved shirts, and shorts or jeans. Almost all the boys and some girls wore running shoes, but most girls wore shoes.) While in Room 1, the investigators were not aware of any background or distracting noise, although they infrequently noticed occasional vehicle noise from the road outside the school.

There were no ancillary areas for Ms. Thompson's use other than the library, the gymnasium (or outdoor areas), and the wide hallway outside the classroom. The library was used infrequently, although the librarian visited Room 1 to read stories and introduce the children to books in the library. Ms. Thompson made use of the gymnasium and fields when taking her class for physical education. And the hallway was sometimes used by the children for work which required space, and sometimes for music lessons which Ms. Thompson also taught.

## The grade one teacher: Ms. Thompson

### Introduction

Ms. Joan Thompson was born and received all her education in the province of Alberta. Although born in a large city, she lived most of her early life with her father, mother, and sister on a farm. Neither of her parents completed high school, but while her father farmed, Ms. Thompson's mother was the homemaker as well as farmer's helper.

Ms. Thompson attended two universities in the province, specializing in the Social Sciences, and earning her teaching degree through a combination of summer school and winter courses. Subsequent to obtaining her teaching degree, Ms. Thompson had taken two university courses in counselling psychology. She had no specific plans for further formal study, and seemed very content to continue to teach grade one classes.

For 17 years Ms. Thompson had taught elementary school grades in

Alberta, but at the time of this study she was in her first year teaching in Westham. She was married, with three children -- at pre-school, elementary school, and secondary school -- of her own. She was a genial person, being described on first impressions by one investigator as:

> Talkative and easy to talk to ... very confident, self-assured ... very natural, good fun, animated sort of person ... speech is sharp, loud but pleasant, uses voice to dominate [in the classroom setting] (Anecdotal Notes A, 1).

Perhaps Ms. Thompson's decisions concerning teaching and her style of teaching were very much influenced by her perceptions of herself as a teacher. During various interviews, Ms. Thompson showed a good deal of knowledge about her pupils and their family backgrounds. Her comments indicated that she gave a great deal of thought to the feelings and perceptions of her students. In response to a question asking what had influenced her in the selection of the goals she had for her grade one class, Ms. Thompson replied, in part:

> I think my own children have a great deal -- knowing when they were happy and when they were unhappy in school and what happend in the situation ... I'm basically a middle-of-the-road kind of person anyway. I think my own conscience has a lot to do with it, my own feelings towards myself and what I think my job is, because I'm probably a very dedicated teacher -- I think you can say that about me whether you agree with anything I do or not. I really love teaching (Teacher Interview A, Part 1).

Ms. Thompson's statements, quoted above, were supported by the results she obtained on the Minnesota Teacher Attitude Inventory (MTAI). Her score, at the 73rd percentile, is a high indication that she possessed "those attitudes ... which predict how well he (she) will get along with pupils in interpersonal relationships, and indirectly how well satisfied he (she) will be with teaching as a vocation" (Cook, Leeds, and Callis, 1953:3).

Further information concerning Ms. Thompson's personality was provided by the Sixteen Personality Factor Questionnaire (16 PF). According to her responses on this instrument, she was extremely outgoing, and very tender-minded, group-dependent, and assertive. The results on the other 12 factors of the questionnaire seemed to confirm Ms. Thompson's own self-assessment as being "basically a middle-of-the-road kind of person" (see Appendix I).

When asked how the curriculum for her class was determined, Ms. Thompson replied:

> I was handed (by the vice-principal) a reading series and told to use it ... I use it mainly as my core. I can't really tell you what kind of program that I use because it is very integrated and it is very much my own because I have taught for so long (Teacher Interview A, Part 1).

Ms. Thompson's selection of curriculum content obviously was quite arbitrary. She relied on her own experience and sense of what was appropriate for her pupils when making curriculum judgements. Although at first this statement may seem at odds with Ms. Thompson's comment that she was simply handed her teaching resources without the opportunity of stating her own preferences, it can be seen that, having accepted the resource materials, she was selective and discriminating in the use made of them. As she admitted in another context, "I have almost complete freedom ... because I don't have any interference from the principal or vice-principal on what I'm doing" (Teacher Interview A, Part 2). For example, in science and mathematics she used the provided texts simply as guides. In arts, crafts, and music she said it was simply a case of "do your own thing". And she "completely integrated" social studies with the language arts (Teacher Interview A, Part 1).

Perhaps the strongest influence on Ms. Thompson's role as a teacher was her acceptance of the duty to serve all her pupils to the best of her ability. Repeatedly during the discussion of students selected for the Silberman classifications, she reasoned that she accepted all her students because:

> I just sort of believe that you get stuck with all sorts of kids and it's your job to teach them (Teacher Interview A, Part 2).

And in an unsolicited note, Ms. Thompson stated:

> I don't really believe in pre-judging students as to their achievement. I feel if a teacher expects a student to be always slow, the student is. If a teacher always expects a student to be bright, the student has a fair amount of pressure and when he does need help, he doesn't always get it. Students have ups and downs (Note in response to the task of ranking pupil achievement in language arts and mathematics).

Perhaps underlying these statements is the belief she held concerning people in general:

> People are the most interesting thing in the world because of their individuality. And because one is never sure when dealing with people or interacting with them what will happen next. This is what makes life so interesting, enjoyable and sometimes just plain fun (TIBT Response Booklet A).

It seems that Ms. Thompson's positive view of people motivated her acceptance of the role of teacher and "helper" for all her pupils, simply because they had been assigned to her.

In response to a question asking what she considered to be the most important tasks that a teacher does, Ms. Thompson replied:

> I think a teacher is a helper, basically. I think you have to help the children to develop and I think, because you have to help them develop, you have to be a fairly efficiently organized person ... it may look like chaos in here, but I actually know what I am doing -- why I am doing what I am doing -- whatever it is ... (Teacher Interview A, Part 1).

Ms. Thompson emphasized that she saw her role as that of a helper -- as one who "starts the development" and keeps "pushing it along." She stressed that, at the grade one level, the teacher is not a leader.

In her responses to the This I Believe Test (TIBT), Ms. Thompson showed her major orientation to be System 1, with a secondary orientation in System 4. The description of a System 1 person (see Appendix G) again largely confirms the picture of Ms. Thompson's personality and professional orientation which have been presented here.

In the following sections, Ms. Thompson's goals and classroom procedures are presented and analysed for consistency and effectiveness. A few items, selected because of their saliency, are discussed in detail in order to help explicate the link between Ms. Thompson's goal statements and the operationalization of those goals. The goal statements have been extracted largely from the Teacher Interview A, Part 1. Information concerning curriculum content and organization, and instructional methods and classroom policies have been extracted from the same document, and also from Anecdotal Notes A, 1 and 2; Shadow Study Notes A; Pupil Interview A; and Teacher Interview A, Part 2 documents.

## Goals

When asked what kind of things she thought her grade one pupils should be gaining from school, Ms. Thompson replied:

> Well, I can always give you the old cliche 'develop them to their fullest potential'. I think they should get a feeling of security. I think perhaps that is the most important thing -- that they know where they stand ... I think the second things is ... to get them to feel that they want to read (or do whatever learning activity is being presented).... I am a very skills-oriented person, but I would think that would still come third in grade one (Teacher Interview A, Part 1).

In the continuing interview, Ms. Thompson mentioned several secondary goals which have been collated, interpreted, abbreviated, and grouped as follows:

Emotional goals

- security
- success
- enjoyment of learning
- pride in accomplishments
- positive attitude to school
- overcoming the cultural shock of entering grade one

Social goals

- coping in a situation where there are other children
- overcoming social setbacks
- being responsible, especially for personal acts

Academic goals

- learning skills of language and numeration

In related comments, Ms. Thompson stressed that emotional development was of prime importance, and she tried to help her pupils mature. She added that:

> I don't think you can teach any kid anything if you don't get them so that they want to do something for you or for themselves. Basically, you want to get them so that they will do it for themselves, but at first they do it for you -- because they like you or whatever (Teacher Interview A, Part 1).

When asked if she thought the children were achieving her goals to her satisfaction, Ms. Thompson replied:

> I would never be satisfied, but they are aiming at it. There is a lot of development in the children (Teacher Interview A, Part 1).

And she implied that, although not "totally happy" with the progress of her pupils, she was, without excepting any of the students, "pretty happy."

## Curriculum content and organization

Ms. Thompson's selection and arrangement of her curriculum was largely of her own choosing, although she had been restricted in her resource materials to certain texts with which she had been provided at the beginning of the year by the school administration. As is typical of many grade one classrooms, various language arts and reading activities dominated the day on practically all days and, as Ms. Thompson expressed herself:

> As a language arts person I would probably teach it morning, noon and night (Teacher Interview A, Part 1).

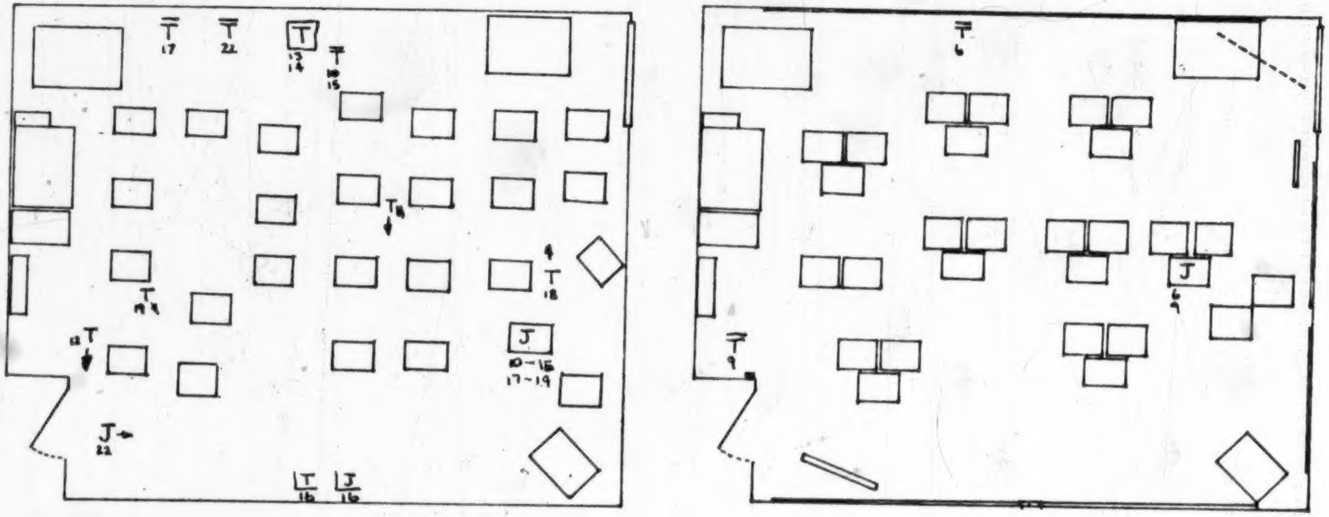
She did, however, have a flexible timetable which she used as a guide in order that each area of learning would be fairly represented. Her curriculum content and organization have been collated and summarized as follows:

Subjects

- language arts (including spelling)
- reading (including class library visits)
- mathematics
- social studies
- science
- arts and crafts
- music (in the lunchroom)
- physical education (in gymnasium or on field)

Timetable examples

| | Day 1 | Day 2 |
|---|---|---|
| 8:40 | language arts | physical education |
| 9:15 | reading | story and reading (library) |
| 9:50 | RECESS | RECESS |
| 10:05 | reading (continued) | language arts |
| 11:15 | LUNCH | LUNCH |
| 12:30 | physical education | story |
| 12:50 | | mathematics |
| 1:15 | mathematics | story |
| 1:35 | story | arts and crafts |
| 1:45 | music | music |
| 2:10 | SCHOOL OUT | SCHOOL OUT |



T 17
T 22
T 13 14
T 10 15
T 8
T 18
T 19
T 21
J 10–15 17–19
J 22
T 16
J 16
T 6
J 6 9
T 9

NOTE: Pupil Desks are not in usual Configuration.
(See Figure 7a)

NOTE: Pupil Desks are in usual Configuration.
(See also Figure 6, p. 98 )

Figure 7b.

Figure 7a.

KEY

T = Ms. Thompson
J = Jodi
$\overline{J}$ = Standing
←J = Walking
$\boxed{J}$ = In Desk
Subscript = Location in order of Sampling.

Figure 7

Map of Ms. Thompson's and Jodi's Classroom Locations plotted every tenth minute throughout part of one day (Shadow Study Notes, A)

That there was some variability in the class' timetable is evident from the above examples, in spite of Ms. Thompson's concern over teaching language arts to excess. Ms. Thompson claimed that she integrated social studies and science with language arts. An example of this type of integration is included above. The afternoon story on Day 2 concerned birds and how to construct a bird from paper -- the story was followed by the actual construction of a bird.

Although Ms. Thompson taught almost all subjects herself, she and another grade one teacher sometimes combined their classes for music. Ms. Thompson was a competent pianist and often accompanied the children's singing. Further variety was added to the timetable by the school librarian and library. On some occasions the librarian visited the classroom to read to the children and introduce new books to them. At other times, the class visited the library in order to select and read books there.

The variety and "chaos" in Ms. Thompson's room, although at first bewildering to the two classroom observers, did have an organized focus:

> Halfway through a 70-minute language arts period, even I had difficulty in seeing the pattern of events and I have been in the classroom for (just) over two weeks; (but) in all that apparent chaos there is a system (Anecdotal Notes A, 1).

### Instructional methods and policies

As far as Ms. Thompson was concerned, the basic unit in her class was the individual child. Although she had divided her class into three ability groups for some instructional purposes (principally in reading) and she encouraged partner and small group work (see pupil desk locations, Figure 7a) for social goal reasons, she attempted to meet her emotional goals partly through interacting with the children on:

> A one-to-one relationship, really, in most cases. And I would find that, for every child, I would probably be doing something different. And at different times, they need different things, too (Teacher Interview A, Part 1).

The classroom observers noted that Ms. Thompson was almost continually very busy in the classroom, largely because of her method of setting the class to work (as a whole group or in smaller groups), and then checking the pupils' workbooks or worksheets individually as the children completed them. This assessment of Ms. Thompson's numerous interactions with her pupils is supported by the Expanded Brophy-Good Teacher-Pupil Dyadic Interaction Classroom Observation System (DICOS) data (see Appendix C ). According to this instrument, in 10 language arts and three mathematics lessons, Ms. Thompson interacted with individual pupils on 1401 occasions (an average of almost 52 times per pupil). Of this number, 1224 interactions were private (an average of over 45 per pupil), and 177 were public (an average of more than six per pupil). But in the process of keeping the teacher very busy with an endless stream of marking, the children were often trailing behind Ms. Thompson or left waiting at their desks in order to have their work checked.

Chorus responses to teacher questions during whole-class presentations were used, although Ms. Thompson professed to disapproving of this instructional method because it masked the failings of the less capable children. There was a small amount of class discussion, but quite extensive use of storytelling -- to interest and instruct the pupils. (One classroom observer thought that story reading might also have been used as a control technique in order to gather the children and gain their attention, and as a reward for good work or behaviour.)

But much activity centered on workbooks and a considerable number of teacher-prepared worksheets, as illustrated by the following classroom observer comments:

> The number of worksheets prepared -- one for each child -- was extensive.

And on another occasion:

> Again the number of worksheets ... prepared for the morning's work was amazing (Anecdotal Notes A, 1).

Ms. Thompson mentioned that she had been accustomed to having specially hired teaching assistants to help her prepare teaching materials and to assist with instructional activities, but a change in the Westham school board policy had ended this practice. Ms. Thompson gave no indication that she had attempted to gain the assistance of volunteer parent aides. She did, however, make use of the services of grade six pupils, especially in reading instruction. A summary of Ms. Thompson's instructional methods and classroom policies has been culled from teacher interviews and observer notes and is presented below:

Methods

- individual seatwork (teacher has differentiated pupil expectations)
- partner and small group work
- ability group work
- whole-class presentation and chorus responses
- worksheets (teacher prepared)
- workbooks
- teacher-led discussion (for whole-class and groups)
- projects (arts and crafts)
- use of learning materials (especially in mathematics and science)
- 'interest' displays (science objects)
- audio-visual aids
- use of grade six pupil aides
- pupils may work alongside but not share with others
- positive reinforcement of pupil behaviour

Policies

- use of auxiliary learning spaces
- free movement and conversation allowed if for 'good reason'
- pupils clean tables and put up chairs at day's end
- recognized deviant behaviours included:
  - being impolite to others (e.g., bothering)
  - interrupting when teacher is busy with others
  - copying (although assisting was allowed)
  - tattling
  - fighting

Although Room 1 was not provided with, or specifically subdivided into, differentiated learning activity areas, Ms. Thompson often grouped the children on the floor for story reading (see location T16 in Figure 7b) and incorporated the hallway outside her door as an occasional activity area. Other areas used by her class included gymnasium, field, lunchroom (for music), and library. Within the classroom, it was Ms. Thompson's policy to allow pupils to move and converse freely provided they did not bother other people. As indicated in Table 3, the children did not generally choose to move about the room a great deal, possibly because, when assigned to seatwork, Ms. Thompson's worksheets and practice of marking during the lesson kept the children in their seats for much of the time.

Before going home each day, the children were required to clean their desk tops, put up their chairs, and leave no personal items on the floor. This policy was probably attributable in part to Ms. Thompson's goal of teaching self-responsibility for, as she commented to an interviewer:

> That is their job. We talked about the caretaker -- it's not his job to pick up our pencils and things (Teacher Interview A, Part 1).

| Time samples in order | Location of pupils and teacher at time of sampling (every 10th minute). | | | | | | Notes |
|---|---|---|---|---|---|---|---|
| | in own desks (grouped) | moving to/ from desks | in own desks (in rows) | standing about/ sitting on floor | location of teacher | out of room | |
| 1 | P.E. LESSON CONDUCTED IN GYM. BY MS. THOMPSON (pupil N = 24) | | | | | | At end of p.e. lesson pupils lined up for water fountain and library. |
| 2 | | | | | | | |
| 3 | READING LESSON CONDUCTED IN LIBRARY BY THE LIBRARIAN (pupil N = 26) | | | | | | |
| 4 | (Pupils all sit on floor, then take books to tables for reading.) | | | | | | Librarian reads story, then pupils choose own readers. |
| 5 | | | | | | | |
| 6 | 14[a] | 4 | | 3 | | 5 | Returned to own room. |
| 7 | RECESS -- ALL CHILDREN OUTSIDE | | | | | | Children lined up to start and end recess. |
| 8 | | | | | | | |
| 9 | 25[a] | | | | | 1 | Pupils colour paper ducks. |
| 10 | | | 26[a] | | standing F[b] and C | | Episodes #10-15: pupils arrange desks in rows for teacher administered test. |
| 11 | | | 26[a] | | walking among C desks | | |
| 12 | | | 26[a] | | walking close to door | | |
| 13 | | | 26[a] | | sitting in chair F and C | | |
| 14 | | | 26[a] | | | | |
| 15 | | 4 | 6[a] | 7 | standing F and C | 9 | Pupils leave for lunch |
| 16 | | | | 26 | sitting on floor R and C | | Teacher reads story |
| 17 | | 1 | 23[a] | 2 | standing F | | Episodes #17-19: pupils return to desks and ask to keep in rows for Math. |
| 18 | | | 25[a] | 1 | walking close to window | | |
| 19 | | | 26[a] | | walking among desks | | |
| 20 | CLASS TAKEN INTO HALLWAY FOR LESSON -- ROOM TOO HOT AND STUFFY. | | | | | | Teacher reads short story: how to construct a bird. |
| 21 | | | | | | | |
| 22 | | 2[a] | 19 | 5 | standing F | | Pupils construct paper birds. |
| 23 | MUSIC LESSON IN LUNCH ROOM WITH ANOTHER GRADE ONE CLASS -- MS. THOMPSON | | | | | | Pupils stand or sit on stone floor as directed by teacher. |
| 24 | ACCOMPANIES ON PIANO (pupil N = 55; 2 teachers) | | | | | | |
| 25 | | | | | | | |

a. location of Jodi
b. front (F), centre (C) of room

Table 3. Location of pupils and Ms. Thompson as sampled every tenth minute throughout one day (Shadow Study Notes A).

Ms. Thompson had formulated rules to discourage certain deviant behaviours, although these rules were not always observed by the children or insisted upon by the teacher. She mentioned that two rules had been set at the beginning of the year: be polite to others ("bothering" others are considered impolite), and do not interrupt when the teacher is working with another group. Tattling ("telling on one another") was not encouraged for any but the most serious reasons, and fighting was not allowed, of course.

The classroom observers noted that there were frequent occasions when Ms. Thompson felt it necessary to resort to desist techniques. According to Ms. Thompson, if the children were too noisy or inattentive she would:

> Just ask them to be quiet. Or tell them to be quiet. First time I ask -- the second time I tell. That's a constant thing -- you are always doing it. It's only by words. I think it's an emotional thing. I think that's why grade one teachers get so tired because it is a constant emotional repeating: 'Be quiet, be quiet; sit down, sit down' (Teacher Interview A, Part 1).

### Discussion

Ms. Thompson stated that emotional development was of prime importance in the goals she had for her pupils, and of all aspects of emotional development she particularly emphasized security as "the most important thing." Her desire for the children to feel secure seemed to underlie some of the other goals given by Ms. Thompson, for example, achieving success and coping in a situation where other children are present.

Evidence of Ms. Thompson's efforts to create an atmosphere of security for her pupils may be found in her instructional methods and classroom policies. By using the seating arrangement shown in Figure 7a (see p.107), for example, she made it possible for the children to sit in dyads or triads and become familiar with other children without being isolated (as suggested in Figure 7b) or overwhelmed by too large a group. Further interaction amongst the children was encouraged by her policy of allowing free movement and conversation.

It is also probable that the children benefited from being placed in ability groups. The group settings presumably helped the children be less conscious of whatever academic weaknesses they may have in the total class setting. According to the classroom observers, Ms. Thompson was an accomplished story reader, and her practice of gathering the children around her on the carpeted floor for short stories again probably helped develop their sense of comradeship and togetherness, and helped them relate more closely to their teacher.

Ms. Thompson also used more overt ways of relating to the children. She made extensive use of positive reinforcement to encourage acceptable behaviour, but seldom rebuked or criticized the children publicly. One classroom observer noted:

> (Teacher gives) quiet desists, seldom says anything openly to an individual. Goes over and gives them (criticism) privately (Anecdotal Notes A, 2).

Another classroom observer noted:

> Teacher calls individual children to her when she wants to rebuke, chide, or criticize them rather more severely than usually. These interactions are conducted in quiet tones -- not 'public' at all. I don't know whether this is because of the presence of the observer -- somehow I don't think so -- this would be her usual style, I feel (Anecdotal Notes A, 1).

Ms. Thompson attempted to convey her acceptance and positive feelings for children in stronger terms. One classroom observer recorded:

> 'Love' shown frequently in classroom. 'I love you, too, Deirdre' -- this type of comment used several times during the morning. (The teacher) wants to show love towards the children (Anecdotal Notes A, 1).

Perhaps the term 'love' is too dramatic for use in this setting, and it is possibly an overused word, but this type of interaction is yet another example of Ms. Thompson's concern for the sense of acceptance and security which she wanted her pupils to have.

In spite of Ms. Thompson's desires and positive efforts to provide a sense of security for her pupils, there were certain aspects of her teaching which may have unwittingly helped undermine her goal. Possibly the most serious of these detractors was the pressure she exerted on the children to complete a learning task quickly. The classroom observer recorded several instances of such teacher comments as:

- 'I'll give you only five minutes for that. Ready - set- go!'
- 'Quick, everybody! Zoom!
- 'One, two, three, four tables (of work groups) finished!' (Anecdotal Notes A, 1).

And:

- The teacher is very active, and as a result, the kids don't have too many free moments.
- I get exhausted following the kids (in using the observation system) who are following the teacher ... I wonder what the kids feel about the steady pressure.
- The students were worked hard from 12:40 - 2:10 -- little wasted time. Extremely productive for any room, let alone a grade one on a Friday afternoon (Anecdotal Notes A, 2).

It is possible that the pressure of time negatively affected Ms. Thompson's interaction with individual children, as well as causing the children some concern. Evidence of the negative effects of "time pressure" is provided by the classroom observers. One observer noted that a boy's attempted work-related contact with Ms. Thompson was:

> Repulsed and delayed quite firmly -- 'No. I haven't got time to help you with that word, Glen. I'll have to help you with it later.' (Anecdotal Notes A, 1)

This incident was particularly notable since Glen was a poor reader and wanted assistance with his reading.

The pressure of time was encouraged by the use of worksheets, which provided the children with a finite task. Once the pupils had completed an assigned task (which they appeared to do as quickly as possible), it was Ms. Thompson's practice to mark each child's paper before assigning further tasks. But, because the children worked fast, there was continually a contingent of pupils waiting to have their worksheets checked, with the result recorded by one classroom observer during a mathematics lesson:

> Momentum is low because all -- or nearly all -- work in Math. is written, very few oral examples. Teacher marks everything individually. This may account for the need for constant admonitions -- children have to wait so long for attention that they become restless (Anecdotal Notes A, 1).

Thus, the pressure to finish tasks quickly may have had several negative effects. One, to cause pupils to feel anxious because they did not finish by a stipulated time or as quickly as others; two, to cause a marking bottleneck resulting in a constant line-up of waiting, restless students; and three, to place the teacher in a situation where she could not, or felt she could not, respond to some important pupil-initiated contacts. Some support for this analysis of Ms. Thompson's classroom management skills is obtained from the High Inference Rating Scales (HIRS) observations (see Appendix I ). According to these observations, Ms. Thompson's weakest area of classroom management and instructional skills was in overlappingness (the ability to deal with more than one student concurrently).

There seem to be sufficient grounds to suspect that Ms. Thompson's pupils may not have felt the security she desired for them. This argument, however, is not entirely supported by the various pupil attitude questionnaires administered to the children. From Table 4, it may be seen that on two factors from different instruments, the majority of pupils had positive attitudes towards their class (MCI) and towards their interaction with instruction (OSAT). The results of the interview with Jodi, the Shadow Study subject, were also conflicting, but perhaps throw some further light on the topic.

| Instrument | Factor | | | Complete instrument | |
|---|---|---|---|---|---|
| | Title | Jodi's score (max) | Class mean (SD) | Jodi's score (max) | Class mean (SD) |
| MCI | satisfaction with the class | 21 (27) | 21.07 (3.55) | 113 (135) | 101.44 (9.28) |
| OSAT | student-instruction interaction | 67 (84) | 65.04 (5.93 | 91[a] (116) | 91.33 (8.08) |

Note: MCI = My Class Inventory, OSAT = Oral School Attitude Test

[a] scores between 91 and 110 = positive response to school (Rivera, 1973).

Table 4. Attitudes held by Ms. Thompson's pupils, including Jodi, toward selected class and instruction factors.

During the Pupil Interview Jodi claimed she liked school and would attend school even if she was not required to. She was positive about her teacher, the principal, her classmates, her classroom, and the kinds of activities she experienced at school. Such responses are typical of young children. But the child's memory and perception of her classroom interactions are not so generalizable and may, therefore, help provide a rationale for the pupils' positive attitudes.

In response to the interviewer's questions, Jodi said she could not remember how many times the teacher had spoken to her in the course of the day, but she thought it was "very much." She volunteered, too, that she did not "get heck" during the day. When asked for "some of the things in your classroom that you really like," she replied:

> I really like writing on the chalkboard and I like drawing and making things. I like reading to the teacher.
>
> Interviewer: Do you get to read to the teacher very much?
> Jodi: Yes
> Interviewer: ... When does that happen?
> Jodi: It happened yesterday. Just about every day.

Later on in the interview, when asked to select "the one thing from all of today that made you happiest at school," Jodi replied:

> Drawing and reading.
>
> Interviewer: When you were reading or when the teacher was reading?
> Jodi: Both of us were reading.

Although in overall terms Jodi interacted with Ms. Thompson only slightly more frequently than her classmates, it appears that she perceived a very positive and accepting relationship, and felt secure in this relationship. It is not clear whether the majority of the pupils in Ms. Thompson's class shared this suggested perception (See Appendix A ).

It is possible that the expected negative effects of Ms. Thompson's pressure to work hard and do well were lessened by her teaching style. Although categorized very low on empathy and quite low on warmth (HIRS, see Appendix F ), Ms. Thompson somehow conveyed to her pupils her genuine acceptance and knowledge of them and her concern for them as individuals. As well as providing a general atmosphere in which the children felt comfortable (described by the Shadow Study pupil as "fun"), Ms. Thompson, through her own hard work and organization, took part in numerous dyadic contacts with her pupils. Ms. Thompson initiated more than 77 percent of these contacts (DICOS A). As one classroom observer noted:

> Classroom - real hive of activity, teacher very busy. Gives of herself a great deal (Anecdotal Notes A, 2).

Perhaps it was this "giving of herself" which allowed expression of Ms. Thompson's self-admitted love of teaching in a very genuine manner, and which the children correctly interpreted as one of concern for and acceptance of them. The next section introduces the case study pupil.

## The grade one pupil: Jodi Clement

### Influence of the home and attitudes towards school

Jodi Clement was born in one of the few large cities in Alberta and moved with her family to Westham when quite young. She was a very pleasant, seemingly contented little girl, of average height and build for her class, and with a round, open face. At the time of this study, she was just over seven years of age, one of the oldest children in the class. On the day of the Shadow Study, Jodi wore her dark hair at just below shoulder length. She was dressed neatly and sensibly in a white T-shirt, green shorts, white knee-length socks, and sandals.

Jodi was the third oldest child of three daughters and one son in a stable family of six. Her father was an official with an education department (Blishen score of 68.32), and her mother was a real estate salesperson (Blishen score of 48.74), although neither parent had taken their formal education beyond high school graduation. Jodi had suffered from a hearing problem for some time, but a surgical operation in the current school year had removed the handicap. Jodi's general good health was reflected in her record of having missed only four and one half days of school in her grade one year.

According to the Parent Attitude Toward Education Scale (PATES), Mr. and Mrs. Clement had a moderately positive attitude towards education. They had sent Jodi to kindergarten prior to entry into grade one, and expected that eventually Jodi would complete four years of college/ university education. Although recognizing Jodi's extreme youth, her parents expected that she would find a vocation teaching young children or working with animals. Mr. and Mrs. Clement were strongly critical of some aspects of schooling, but they were extremely positive concerning school attendance, the value of education and their support for the school system (PATES).

The impression that Jodi had a generally happy disposition is supported by her response to the Self Esteem Inventory (SEI) as summarized in Table 5. On the factor of the SEI dealing with effective communication between parents and their children, Jodi showed a very positive parental relationship. In common with almost half her classmates, she indicated that there were many times when she would like to leave home and, as negative as this statement seems, it is typical of many children of Jodi's age and should not be regarded too seriously. In her other responses, Jodi indicated that she and her parents had a lot of fun together; that she did not easily get upset at home; that her parents usually considered her feelings; that her parents did not expect too much of her; that she got enough attention at home; and that her parents understood her.

| Instrument | Factor |  |  |  | Complete instrument |  |  |  |
|---|---|---|---|---|---|---|---|---|
|  | Title | Jodi's score | (max) | class mean (SD) |  | Jodi's score | (max) | class mean (SD) |
| SEI | general self-esteem | 38 | (52) | 34.82 (7.72) |  | 80 | (100) | 68.74 (16.59) |
|  | home self-esteem (parents) | 14 | (16) | 10.67 (3.49) |  |  |  |  |
|  | school self-esteem (academic) | 14 | (16) | 12.15 (3.08) |  |  |  |  |
| OSAT | general school attitude | 14 | (20) | 16.74 (2.65) |  | 91[a] | (110) | 91.33 (8.08) |

[a] scores between 91 and 116 = positive response to school (Rivera, 1973)

Table 5. Attitudes of Jodi and her classmates toward selected self, home, and school factors.

This view of Jodi's positive attitude towards her home life is supported by the results of the Shadow Study interview. During the interview, she volunteered that she liked her sisters, that her brother helped her fly her kite, and that the whole family did things together at home and out-of-doors on the weekends. She also mentioned that she cleaned up at home, especially after her baby sister, and that her mother had said she was 'a good house worker' (Pupil Interview A).

On the whole, school seemed to provoke another set of very positive attitudes in Jodi. From Table 4 (see p.117), it is seen that Jodi's scores on two separate factors related to schooling compare favourably both with the absolute scores and class means of these measures.

The MCI responses require further examination, however. A high score on the MCI simply indicates the child's agreement with the items presented. To understand the nature of a score, it is necessary to examine the individual items of the inventory. Factor 1 of the MCI comprises statements generally related to the respondent's perception of classmates' satisfaction with being in the class. Of the nine items in this factor, Jodi gave favourable response to six. The three negative responses were contradicted by positive responses to similar items elsewhere in the inventory, for example:

Item 7: Most pupils are pleased with the class.
Response: Yes
Item 27: Some pupils are not happy in class.
Response: Yes

also:

Item 11: Some pupils don't like the class.
Response: No
Item 36: Some of the pupils don't like the class.
Response: Yes

The variability in the response of young children to attitude questions and inventories is well recognized. Perhaps part of the problem in the case of the MCI is that respondents are generally asked to estimate the attitudes of classmates. On the one item in factor 4 which could readily be interpreted as requiring a personal attitude response, Jodi was absolutely positive, viz:

Item 43: The class is fun.
Response: Yes

This positive response was also reflected in Jodi's response to item 21, "Most children say the class is fun."

Although there may be some doubt as to the exact nature of the attitude of her classmates to school and their class, Jodi's own positive attitude seems quite clear. Apart from the evidence of the three instruments already mentioned, there is the evidence of the Pupil Interview. In response to various questions posed by the interviewer, Jodi indicated that she liked "just about everything in the school," and she "really liked" the classroom. She also agreed that she liked every day at school because "It's fun." Concerning the day of the Shadow Study, Jodi agreed that it had been a happy day for her. The observer's report included the comment that Jodi's behaviour had been consistent throughout the day, and suggested that she had been almost equally consistent throughout the five weeks of the classroom observation part of this study. The final evidence of Jodi's ready acceptance of school is provided by Ms. Thompson in her year-end report to Mr. and Mrs. Clement:

> (Jodi is a) pleasant, helpful student, eager to please (January 1976). Jodi has been a pleasure to have as she is always so willing to undertake any activity (June 1976).

Jodi's typically equable and happy disposition seems to be strongly focused on both the home and school settings. The next sections present a more detailed examination of the particular setting of Jodi's class.

### The social setting

Jodi's class comprised 14 boys and 13 girls who seemed to enjoy a generally busy and pleasant life together as Ms. Thompson's students. Most of the children had been born in Alberta, but some had moved into Alberta from other western provinces, and two children had emigrated with their families from European countries. One boy was repeating grade one for the first time.

According to the OSAT (see Table 5, p.121), 15 children had generally positive attitudes toward school, and the remaining 12 children had mixed attitudes, but there were no children who had predominantly negative attitudes towards the school environment. Responses to a related measure on the MCI support this finding. Responses to seven individual items on the MCI indicate that slightly less than two-thirds of the children were satisfied with their class. A much larger proporption of children (25:27) indicated agreement with the SEI statement "My teacher makes me feel O.K."

Most children recorded moderately positive responses on attitude questionnaire factors dealing with classroom interpersonal relationships (Table 6). Although many children agreed with several items on the MCI indicating friction in the class, there was very little support for the extreme statement that, "Children are always fighting with each other." The factor which received perhaps the largest support was the MCI measure of competitiveness in the classroom. Approximately 75 percent of the pupils agreed that, in the class, children tried to outdo each other. This last finding is perhaps related to the moderately high SES of the school's catchment area, and parents' responses to the PATES which showed general agreement with the importance of schooling. Also, it is quite possibly related to the pressure exerted by Ms. Thompson for pupils to work quickly.

The four verbal sociometric tests which were conducted by the investigators indicate that, with some notable exceptions, Ms. Thompson's pupils interacted with each other in several positive ways and in a fairly eclectic fashion (Figure 8). The most notable exception was Blair, who attracted many more choices than any other pupil in the class. The other exceptions were five isolates (two girls and three boys) who

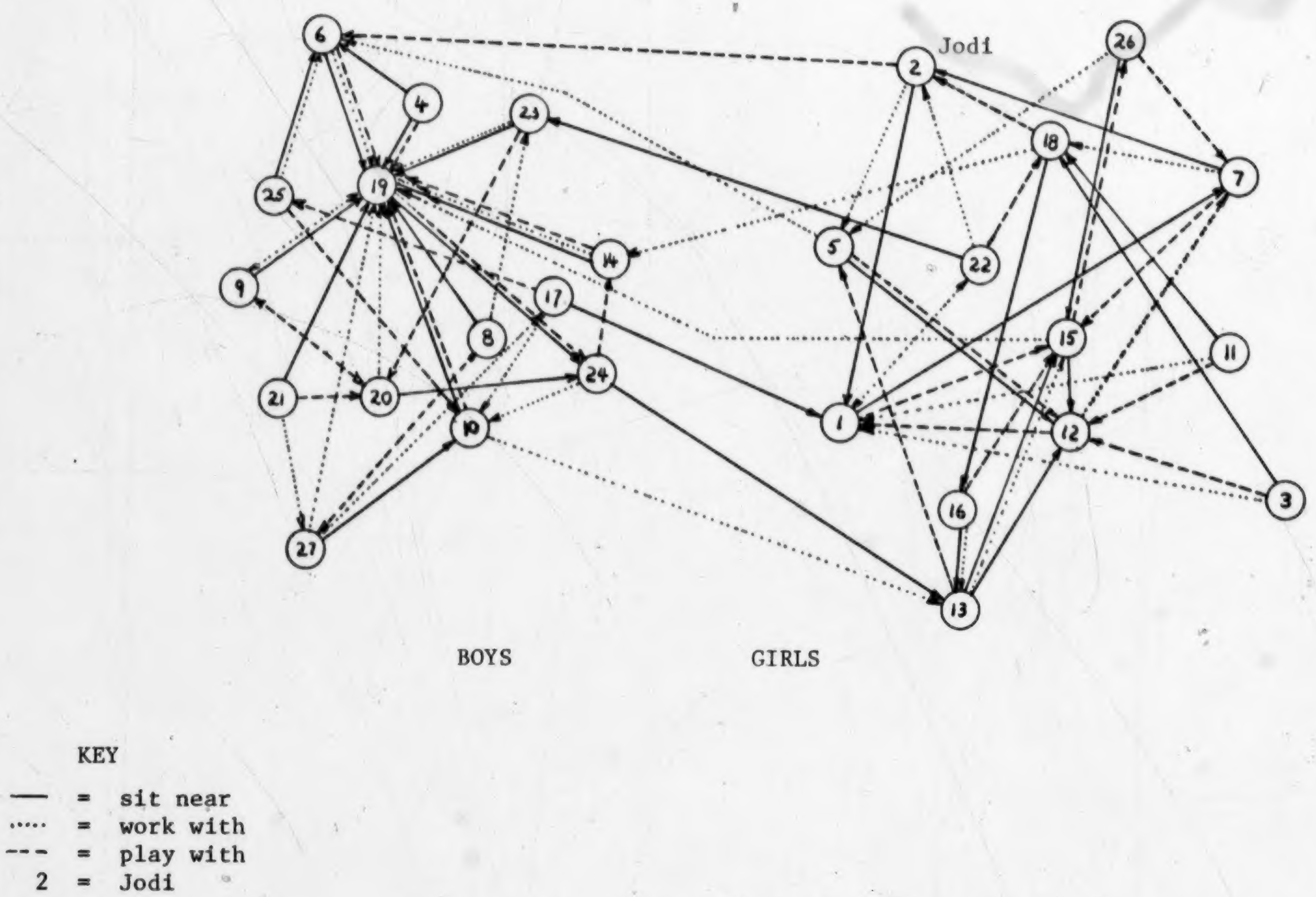

Jodi
2
26
6
4
23
18
7
19
25
5
22
14
9
17
15
11
8
21
20
24
1
12
10
3
16
27
13
BOYS
GIRLS
KEY
— = sit near
····· = work with
- - - = play with
2 = Jodi

Figure 8

Sociogram of Ms. Thompson's grade one class based on first choices of three measures.

attracted no peer first choice preferences. Also, it is evident from Figure 8 that there were several first choices which ignored sex differences.

| Instrument | Factor | | | Complete instrument | |
|---|---|---|---|---|---|
| | Title | Jodi's score (max) | class mean (SD) | Jodi's score (max) | class mean (S D) |
| OSAT | interpersonal relationships | 12 (12) | 9.56 (2.04) | 100 (116) | 91.33 (8.08) |
| MCI | friction | 21 (27) | 20.63 (4.14) | 113 (135) | 101.44 (9.28) |
| | competitiveness | 25 (27) | 22.26 (3.32) | | |
| | cohesiveness | 25 (27) | 21.74 (3.66) | | |
| SEI | social self-esteem | 14 (16) | 11.19 (4.05) | 80 (100) | 68.74 (16.59) |

Table 6. Attitudes of Jodi and her classmates toward selected factors related to the social setting of Room 1.

A more detailed examination of Jodi's social relationships is presented in Table 7. The table indicates that Jodi had several preferences from among her classmates and made many more actual social contacts with them. For the first three choices allowed on each of the four written sociometric tests, she selected a total of seven classmates (four girls and three boys). During the Pupil Interview, however, although neglecting to mention six of the children chosen in her written responses, Jodi added two other classmates to her list of chosen friends.

Seven of Jodi's classmates (all girls) chose Jodi on the four written sociometric tests, including four girls whom Jodi had not chosen. But in addition to the written responses, and the Pupil Interview information, the number of social contacts made by Jodi in the course

| Information source | | | Classmates identified by ID number and sex | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 3 | 5 | 6 | 7 | 10 | 11 | 12 | 13 | 16 | 14 | 15 | 18 | 19 | 20 | 22 | 23 | 25 | 26 |
| | | | F | F | F | M | F | M | F | F | F | F | M | F | F | M | M | F | M | M | F |
| 1. sit near | | | | | | | | | | | | | | | | | | | | |
| | a | written test | 1st | 2nd | 3rd | | | | | | | | | | | | | | | | |
| | | pupil interview | | | | | 2nd | | 1st | | | | | | 3rd | | | | | | |
| | | Shadow Study | | | | | 1 | | | | | | | | | | | | | | 1 |
| | b | written test | | | | | 1st | | | | | | | | | | | 2nd | | | |
| | | Shadow Study | | 1 | 1 | | | | | | | | | | | | | | | | |
| 2. work with | | | | | | | | | | | | | | | | | | | | |
| | a | written test | 3rd | | 1st | | 2nd | | | | | | | | | | | | | | |
| | | pupil interview | | | | | 1st | | 3rd | | | | | | 2nd | | | | | | |
| | | Shadow Study | 2 | 1 | | | 3 | 1 | | | | | 1 | 1 | | 2 | 1 | 2 | | 2 | 2 |
| | b | written test | | 1st | | | | | | | | | | | 2nd | | | 1st | | | |
| | | Shadow Study | | | | | | | | | | | | | | 1 | | | | | |
| 3. like to play with | | | | | | | | | | | | | | | | | | | | |
| | a | written test | | | | 1st | | | | | | | 3rd | | | 2nd | | | | | |
| | | pupil interview | | | | | 2nd | | 1st | | | | | | 3rd | 4th | | | | | |
| | b | written test | | | | | | | 2nd | | 2nd | | | | 1st | | | 3rd | | | |
| 4. actually play with | | | | | | | | | | | | | | | | | | | | |
| | a | written test | | | | | 3rd | | | | | | 2nd | | 1st | | | | | | |
| | | pupil interviews | | | | | | | | | | | | | | | | | | | |
| | | Shadow Study | | | 1 | | | | | | | | | | | | | | | | |
| | b | written test | 1st | | | | 2nd | | | | | | | | | | | | | | |
| | | Shadow Study | | | 1 | | | | | | | | | | | | | | | | |

a = Jodi's choice ; b = chosen by classmates

Notes: Ranking indicates order given (written test) or mentioned (interview). Cardinal numbers indicate number of times behaviours observed.

Table 7. Comparisons among the sociometric verbal tests, interview report of friends, and observed social interactions of Jodi.

of the Shadow Study was also recorded. During the one day, Jodi made contact with 11 of her classmates in 23 separate incidents. Finally, during the Pupil Interview, in addition to the classmates whose names she specifically gave as friends, Jodi mentioned eight other children with whom she played or socially interacted. Based on the various measures mentioned above, Jodi indicated by either verbal or written responses, or by actual interactions, that (at the time the data were collected) she had socially positive attitudes toward at least 19 of her 26 classmates.

It is perhaps surprising that the classroom observer who conducted the Shadow Study said in his summarizing comments that Jodi spoke to few people in classtime. Jodi was, in fact, involved in several interactions in classtime as indicated in Table 7. But Jodi's interactions were quiet, not disruptive in any way, and frequently on-task. Added to these interactions were seven occasions when Jodi addressed the classroom observer to make comments on some paintings hanging in the hallway, on another class receiving a music lesson, and on other school-related matters.

The general impression of Jodi is one of a socially well-adjusted seven-year-old who felt very comfortable both with her peers and with adults. Also, she had very positive attitudes towards boys, although she did not interact with them as much as she did with girls. It seemed as though she felt secure and self-assured in the social milieu of her class.

Academic attributes, ability, and achievement

Ms. Thompson was asked to comment on the scholastic ability of her class as a whole. She noted:

> I have a very wide ability range. I have one at the bottom who is going to a special class next year, and the top student is reading at the end of grade three level (Teacher Interview A, Part 1).

Ms. Thompson pointed out that the wide range in ability was largely confined to Language Arts. She considered that, with the exception of the student destined for a special class, her pupils would be successful in making "an adequate job" of grade two. She was, however, concerned about a boy who had transferred into her class from another school in April of the current school year. The boy was not able to read at all upon transfer and, although making progress, was still not reading at the expected level, yet should be passed on to grade two because of his general ability.

Compared with the other two grade one classes at Jamieson school, Ms. Thompson considered the academic achievement of her class "as good as, and some probably better than, the others" (Teacher Interview A, Part 2). Compared with grade one classes she had taught in other schools, Ms. Thompson considered her present class to be:

> Perhaps better than the ones I have had in the last couple of years, because I have been in low socio-economic areas ... there's a lot more pressure on these children to learn (Teacher Interview A, Part 2).

On the other hand, Ms. Thompson was aware that 20 of her pupils achieved at below the 50th percentile on the Metropolitan Readiness Test (MRT) for the Westham school district -- administered in September, 1975 (Anecdotal Notes A, 1).

Ms. Thompson's opinion of her class received apparent support from the Peabody Picture Vocabulary Test (PPVT) administered on May 25, 1976. From Table 8 it is seen that the mean PPVT score for Ms. Thompson's class was 111.19, with a range from 89 to 143. The mean age equivalent of the class was 97.15 months, compared with an actual age of 81.85 months. Jodi, ranked 17th in her class on the basis of the PPVT, had a score of 102. Although Jodi's age equivalent score surpassed her chronological age, she was actually older than the class mean age but had an age equivalent considerably lower than the class mean (Table 8).

| Item | Jodi | | Class (N = 27) | |
|---|---|---|---|---|
| | value | rank[a] | mean score (SD) | range |
| PPVT IQ | 102 | 17th | 111.19 (16.68) | 89 - 143 |
| actual age (months) | 85 | 4th(2) | 81.85 ( 4.46) | 75 - 94 |
| age equivalent (months) | 87 | 16th | 97.15 | 71 - 127 |
| percentile score | 58 | 17th | 67.37 (24.97) | 28 - 99 |

[a] figure in parentheses indicates number of classmates at equal rank

Table 8. Jodi's results and class rank, with class means, standard deviations, and ranges for the Peabody Picture Vocabulary Test (Form A), May, 1976.

The results of the MRT (Form A) which had been administered to Jodi's class in September, 1975 are summarized in Table 9. A comparison of the percentile ranks in Tables 8 and 9 shows apparent consistency between these attributional measures for the class mean scores, although the range of scores is much narrower for the MRT. This narrowed range is to be expected since the MRT was administered soon after the children had entered grade one, whereas the PPVT was administered at the end of grade one.

| Item | Jodi | | Class (N = 23) | |
|---|---|---|---|---|
| | raw score | rank[a] in class | mean score | (SD) |
| word meaning | 8 | 16th (3) | 9.91 | (2.38) |
| listening | 10 | 10th (5) | 9.65 | (2.96) |
| matching | 4 | 22nd | 8.91 | (2.89) |
| alphabet | 15 | 14th (3) | 14.52 | (2.81) |
| numbers | 12 | 18th (2) | 14.09 | (2.55) |
| copying | 4 | 17th (3) | 6.91 | (3.19) |
| total | 53 | 20th | 63.91 | (10.55) |
| percentile score | 46 | 20th | 68.09 | (19.34) |

[a] figures in parentheses indicate number of classmates at equal rank

Table 9. Jodi's scores and class rank, with class means and standard deviations, on the Metropolitan Readiness Test (Form A), September, 1975.

Jodi's scores on the individual items of the MRT (Table 9) show quite varied levels of readiness. Whereas she was ranked equal 10th in her class on listening skill, her rank dropped to 22nd on matching skill. Other rank scores ranged between these two extremes. Jodi's overall class rank was 20th and her percentile score was 46. These figures are somewhat lower than her performance on the PPVT (Table 8), the change in the percentile score (rising from 46 for the MRT to 58 for the PPVT) being particularly noticeable.

In June, 1976, the Metropolitan Achievement Test (MAT) -- Form 7 was administered to Ms. Thompson's class, and the results are summarized in Table 10. An examination of Table 10 reveals that the percentile rank class mean score was much greater for "total reading" than for "total math." How much this discrepancy reflects the natural attributes of the class, and how much it reflects the self-claimed emphasis placed on language arts by Ms. Thompson, is unclear. (The nature of scoring for the MRT does not help shed light on the matter, even though the MRT includes a "numbers" subtest.) If the percentile rank class mean scores for "total reading" and "total math" are averaged, the figure arrived at (68.27) is remarkably close to the class percentile rank mean scores for the MRT (68.09) and PPVT (67.37) reported earlier.

| Item | Jodi | | Class (N = 27) | |
|---|---|---|---|---|
| | standard score | rank[a] | mean score | (SD) |
| word knowledge | 57 | 19th (4) | 53.89 | (11.15) |
| word analysis | 49 | 10th (3) | 48.33 | ( 9.12) |
| reading | 51 | 12th (3) | 51.52 | ( 9.00) |
| total reading | 51 | 13th | 50.67 | ( 8.79) |
| percentile rank | 90 | 13th | 82.41 | (19.84) |
| total math | 44 | 15th (4) | 44.00 | ( 7.02) |
| percentile rank | 54 | 15th (3) | 54.11 | (20.03) |

[a] figures in parentheses indicate number of classmates at equal rank

Table 10. Jodi's standard score and class rank, with class means and standard deviations, on Metropolitan Achievement Test (Form F) items, June, 1976.

Of particular interest from Table 10 is the general improvement in Jodi's class ranking on the various MAT items compared with her earlier performance on the MRT. In the MRT (Table 9), the class mean scores exceeded Jodi's scores for four of the six subtests; but in the MAT (Table 10), the class mean scores exceeded Jodi's scores on only one of four items (and that one by a very small margin). It appears that Jodi's academic achievement scores show at least a comparative improvement as indicated by her improved class rankings on the MAT items (equal 9th to equal 15th) over the MRT items (equal 10th to equal 22nd). The two tests, of course, measure somewhat different aspects of achievement, nevertheless it is encouraging (from Jodi's perspective) to notice the improved performance in areas of study which presumably are associated with the grade one curriculum.

In view of the MAT results, the information presented in Table 11 is rather surprising. Ms. Thompson was asked to rank order her pupils in language arts and math according to their achievement on a year-end test (or how well she thought they would achieve). She was also asked to rank order her pupils according to how she considered they would "do well in school." The results of Ms. Thompson's deliberations are summarized in Table 11. It is important to note that Ms. Thompson's answers to these three questions were given on May 25th, 1976 -- two weeks before the MAT was administered to her pupils.

From Table 11 it is seen that Ms. Thompson ranked Jodi 20th in language arts, 15th in math, and 16th overall. Yet, according to the MAT scores obtained 16 days later, Jodi actually ranked 13th in her class on "total" reading, and was actually seen to be much stronger in language than in numeracy. Of course, Ms. Thompson's criteria for assessing language arts achievement may have been substantially different from those incorporated into the MAT, in which case closer rankings may not have been expected. It is also interesting to note, however, that Ms. Thompson's projection for Jodi's ranking in math exactly equalled her ranking on the MAT -- 15th. (It would possibly be too speculative to comment on the fact that Ms. Thompson's ranking for Jodi on language arts exactly matched Jodi's MRT total rank -- 20th.)

| Projected rank in class (N = 27) | |
|---|---|
| item | rank |
| language arts | 20th |
| mathematics | 15th |
| overall | 16th |

Table 11. Jodi's rank in class according to Ms. Thompson's perception of her students' achievement on selected measures, May, 1976.

Ms. Thompson's projected rankings for Jodi in language arts and math (Table 11) are reflected in her perceptions of how well Jodi achieved in those areas compared with the expectations she had for them during the year (Table 12). Again, Ms. Thompson seemed to be more favourably impressed by Jodi's performance in math than in language arts. From Table 12 it is seen that Jodi was ranked 3rd of only three pupils who "exceeded" Ms. Thompson's expectations for them (no students "greatly exceeded" expectation) in mathematics. In language arts, Jodi was ranked 4th of seven students who "exceeded" (only one "greatly exceeded") Ms. Thompson's expectations.

| Item | Placement of pupils on various 5-point scales (N = 27) | | | | |
|---|---|---|---|---|---|
| perceived achievement level of expectations for LA | 1 greatly exceeded | 7 exceeded --(4th[a]) | 18 met | 0 below | 1 far below |
| perceived achievement level of expectations for Math | 0 greatly exceeded | 3 exceeded --(3rd[a]) | 23 met | 0 below | 1 far below |
| perceived attitude toward classroom teaching | 12 enthusiastic[a] | 9 interested | 5 passive | 1 uninterested | 0 resistant |
| assessment of academic ability | 2 very bright | 9 bright | 11 average[a] | 3 below average | 2 dull |

[a] indicates Jodi's placement

Table 12. Ms. Thompson's placement of her pupils on various 5-point scales according to her perceptions of them on selected measures, May, 1976.

Also from Table 12, it appears that Ms. Thompson may have attributed Jodi's greater-than-anticipated scholastic achievement to "enthusiasm" (Jodi was one of 12 pupils so categorized) rather than to "ability" (for which Jodi was classified as "average" together with 10 of her classmates). Further clarification of Ms. Thompson's assessment of Jodi's attributes and achievements was attempted by compiling a summary of report card evaluations. This summary is presented in Table 13.

The value of the Progress Report in attempting to assess the accomplishments of grade one pupils in numerical terms is doubtful. From Table 13 it is seen that Ms. Thompson submitted only two written assessments in the course of the year -- one in January and one in June.

| Item | Max. score | Winter, 1975 | | | Summer, 1976 | | |
|---|---|---|---|---|---|---|---|
| | | Jodi's total scores | class mean | (S D ) | Jodi's total scores | class mean | (S D ) |
| group participation | 16.0 | 8.0 | 7.79 | 0.82 | 8.0 | 7.85 | 0.76 |
| individual participation | 16.0 | 8.0 | 7.83 | 0.80 | 8.0 | 7.85 | 0.76 |
| working skills | 12.0 | 6.0 | 5.88 | 0.60 | 6.0 | 5.96 | 0.69 |
| LA effort | 24.0 | 12.0 | 11.88 | 0.60 | 14.0 | 13.41 | 2.41 |
| LA achievement | 24.0 | 12.0 | 11.88 | 1.45 | 12.0 | 12.56 | 2.18 |
| Math effort | 4.0 | 2.0 | 1.96 | 0.20 | 2.0 | 2.27 | 0.52 |
| Math achievement | 4.0 | 2.0 | 1.96 | 0.35 | 2.0 | 2.15 | 0.53 |
| Science/Health effort | 4.0 | 2.0 | 2.00 | 0.00 | 2.0 | 2.00 | 0.00 |
| Science/Health achievement | 4.0 | 2.0 | 2.00 | 0.00 | 2.0 | 2.00 | 0.00 |
| S.S. effort | 4.0 | 2.0 | 2.00 | 0.00 | 2.0 | 2.00 | 0.00 |
| S.S. achievement | 4.0 | 2.0 | 2.00 | 0.00 | 2.0 | 2.00 | 0.00 |
| Art effort | 4.0 | 2.0 | | | 2.0 | | |
| Art achievement | 4.0 | 2.0 | | | 2.0 | | |
| Music effort | 4.0 | 2.0 | | | 2.0 | | |
| Music achievement | 4.0 | 2.0 | | | 2.0 | | |
| P.E. effort | 4.0 | 2.0 | | | 2.0 | | |
| P.E. achievement | 4.0 | 2.0 | | | 2.0 | | |
| Printing/Handwriting effort | 4.0 | 2.0 | 2.04 | 0.35 | 2.0 | 2.00 | 0.28 |
| Printing/Handwriting achievement | 4.0 | 2.0 | 2.04 | 0.35 | 2.0 | 2.00 | 0.28 |

Note: total class scores were not available for some items

Table 13. Jodi's scores for "effort" and "achievement", with class means and standard deviations, obtained from her School Progress Report.

Each subject was accorded a separate mark for "effort" and "achievement" but, as may be seen in the table, Jodi's scores for both these measures were exactly duplicated in every instance except language arts, Summer 1976. In every subject, except language arts, Jodi's assessment was "satisfactory" for both "effort" and "achievement." In the summer 1976, she was assessed "very good" for "effort" in both reading and spelling skills. As suggested by the class mean scores recorded in Table 13, Jodi's report card differed little from those of her classmates in the matter of numerical assessments, and this data source does not help explicate Jodi's scholastic achievements. Some assistance is provided, however, by the verbal teacher comments included in the Progress Report.

Ms. Thompson wrote the following comments in Jodi's report:

> Pleasant, helpful student, eager to please (January, 1976).
>
> Jodi has been a pleasure to have as she is always so willing to undertake any activity (June, 1976).
>
> Jodi is reading and will be finished the pre-primers at the end of January. The last month has shown a spurt in her achievement -- this is very evident in her understanding and hearing the sounds that have been taken. Since she has developed more self-reliance and depends upon her own self to get the work done, she has done better work (January, 1976).
>
> Jodi has completed the grade one (language arts) program. I hope her inner drive will continue (June, 1976).
>
> Good progress (in math) -- works a little slowly but is usually correct (January, 1976).
>
> Jodi is doing much better now (in math) as she has speeded up (June, 1976).
>
> Does her best (in printing/handwriting). Tends to confuse b and d, p and q, etc. (January, 1976).
>
> Jodi works hard at her printing (June, 1976).

Ms. Thompson's comments highlight Jodi's generally positive attitude to her work, and an apparent "spurt" in her rate of learning around December, which seemed to extend into increased speed in performing work tasks, and an "inner drive." Jodi's improved performance is almost certainly related to her improved hearing following an operation to correct a hearing defect. Such a learning spurt would also help explain Ms. Thompson's high ranking of Jodi according to her expectations for Jodi (see Table 12). And the actual improvement in Jodi's class rankings on the standardized language arts and math tests may also be explained. Still unexplained, however, is the apparent discrepancy between Jodi's actual achievement on the MAT in June, 1976 (see Table 10), and Ms. Thompson's projected rank for her in language arts in May, 1976 (see Table 11). Also unexplained is Ms. Thompson's perception of Jodi as having achieved better in math than in language arts, whereas the various standardized tests show the reverse to be the case.

## Classroom coping behaviour

Because the language arts were accorded so much time by Ms. Thompson, practically all the CASES data for her class were collected during language arts activities. It is seen from Table 14 that, in Teacher Directed (TD) settings, Ms. Thompson's class was characterized by "attentive, adult-oriented, and compliant" (Style E), and "conforming, passive, and submissive to directions" (Style H) behaviours. Only one boy, who exhibited "dominative, active aggressive, annoying, and manipulating" (Style A) behaviours, was an exception in these settings.

| Jodi's coping styles | | TD Settings | | | | | | NTD Settings | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LA | | Math | | Combined | | LA | | Math | | Combined | |
| | | score | vis% | score | vis% | score | vis% | score | vis % | score | vis % | score | vis% |
| A (aggressive, manipulative) | | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.22 | - | | - | 0.22 |
| | class $\overline{X}$ | | 0.12 | | 0.02 | | 0.10 | | 0.12 | | 0.26 | | 0.13 |
| | S.D. | | 0.27 | | 0.09 | | 0.23 | | 0.18 | | 0.79 | | 0.17 |
| B (resistant, peer-oriented) | | 14 | 0.43 | 3 | 0.40 | 17 | | 26 | 0.46 | - | | - | 0.46 |
| | class $\overline{X}$ | | 0.24 | | 0.12 | | 0.24 | | 0.18 | | 0.10 | | 0.18 |
| | S.D. | | 0.16 | | 0.19 | | 0.14 | | 0.14 | | 0.19 | | 0.13 |
| C (passive, dreamy) | | 5 | 0.78 | 1 | 0.67 | 6 | 0.75 | 2 | 0.18 | - | | - | 0.18 |
| | class $\overline{X}$ | | 0.19 | | 0.31 | | 0.22 | | 0.26 | | 0.11 | | 0.25 |
| | S.D. | | 0.25 | | 1.06 | | 0.26 | | 0.24 | | 0.27 | | 0.24 |
| D (distractible, peer-dependent) | | 5 | 0.19 | 3 | 0.50 | 8 | 0.25 | 14 | 0.30 | - | | - | 0.31 |
| | class $\overline{X}$ | | 0.30 | | 0.29 | | 0.31 | | 0.57 | | 0.34 | | 0.55 |
| | S.D. | | 0.17 | | 0.51 | | 0.23 | | 0.29 | | 0.43 | | 0.28 |
| E (attentive, adult-oriented) | | 33 | 1.28 | 1 | 0.17 | 34 | 1.07 | 9 | 0.24 | - | | - | 0.24 |
| | class $\overline{X}$ | | 1.85 | | 1.47 | | 1.84 | | 0.26 | | 0.22 | | 0.26 |
| | S.D. | | 0.86 | | 1.56 | | 0.77 | | 0.13 | | 0.37 | | 0.13 |
| F (assertive, task-oriented) | | 2 | 0.08 | 0 | 0.0 | 2 | 0.06 | 14 | 0.31 | - | | - | 0.31 |
| | class $\overline{X}$ | | 0.03 | | 0.01 | | 0.03 | | 0.17 | | 0.32 | | 0.21 |
| | S.D. | | 0.03 | | 0.04 | | 0.03 | | 0.10 | | 0.45 | | 0.10 |
| G (independent, on-task) | | 2 | 0.04 | 0 | 0.0 | 2 | 0.04 | 143 | 1.79 | - | | - | 1.79 |
| | class $\overline{X}$ | | 0.03 | | 0.06 | | 0.04 | | 1.95 | | 1.55 | | 1.95 |
| | S.D. | | 0.05 | | 0.25 | | 0.68 | | 0.31 | | 0.86 | | 0.29 |
| H (conforming, passive) | | 68 | 1.76 | 22 | 2.44 | 90 | 1.89 | 16 | 0.23 | - | | - | 0.23 |
| | class $\overline{X}$ | | 1.60 | | 1.71 | | 1.61 | | 0.19 | | 0.19 | | 0.18 |
| | S.D. | | 0.54 | | 1.17 | | 0.47 | | 0.13 | | 0.34 | | 0.12 |
| Overall CASES Coefficient | | | 5.15 | | 4.43 | | 5.01 | | 6.83 | | | | 6.83 |
| | class $\overline{X}$ | | 5.46 | | 5.04 | | 5.48 | | 6.83 | | 5.82 | | 6.89 |
| | S.D. | | 0.40 | | 2.20 | | 0.44 | | 0.51 | | 2.85 | | 0.49 |

Note: underlining indicates behaviour is visible (> 1.00)
a. Combined total includes tallies from other subject areas.

Table 14. Behavioural styles of Jodi and her classmates according to setting and subject matter (CASES A).

In Non-Teacher Directed (NTD) settings, every pupil visibly exhibited "appropriately task-oriented, independent, and self-motivated" (Style G) behaviours. In addition, one girl exhibited "peer-dependent, distractible, and off-task" (Style D) behaviours, and one boy exhibited both Style D and Style C ("passive, withdrawn, avoidant, and dreamy") behaviours.

The commonly visible styles of behaviour coded in the CASES observations were generally supported by the classroom observers:

- Class procedures well-known. Pupils work along quite independently.
- Pupils working so well they had to be told it was recess time.
- Group responds well to (teacher's) ... instructions (Anecdotal Notes A, 2).

and:

- Nice, friendly atmosphere. Good pupil-teacher rapport (Anecdotal Notes A, 1).

One of the observers also noted that, during the course of this investigation, Ms. Thompson's class had received the school's award for tidiness and good behaviour -- a trophy they would keep for one week.

Although not "visible" in the CASES sense, there was a certain amount of generally inappropriate and even unacceptable behaviour which was noted by the observers:

- Donald put on a show with the counters, making enough noise to get some attention. But all morning he did not participate in classwork-related discussions.

- Cherie and Blair spent a good part of the morning being silly.

- Conrad -- first time he has openly misbehaved (Anecodtal Notes A, 2).

All of these behaviours were noted during one morning. On other occasions, another observer recorded:

- Teacher used three groups -- had different activities going on simultaneously. (She) coordinated this with some success, but with a lot of teacher contacts with pupils, checking and warning them for inappropriate behaviours -- talking, playing, fiddling, not following instructions.

- Teacher complained about lack of pupil attention. The class seemed to be restless (Anecdotal Notes A, 1).

In general, Ms. Thompson's classroom presented a picture of generally on-task, independent behaviours during seatwork in TD settings, interspersed with teacher dependent, conforming behaviours during whole class gatherings for storyreading and some discussion in TD settings. There was a moderate amount of pupil movement about the room and, although there were often non-work related pupil contacts, these tended to be brief and quite discreet.

In most respects, Jodi conformed to the same general pattern of her classmates. During a discussion concerning her pupils following a mathematics lesson, Ms. Thompson included Jodi in a large group of children who:

> Behaved and did all that they were told to do, and that would be almost everyone ... (they) did what was expected (Teacher Sort Task Interview A, 1).

While discussing another mathematics lesson, Ms. Thompson recalled:

> These kids just were not having any problem at all. One way or the other, they were getting them right and just going on. I was really pleased with ... and Jodi, who I didn't expect to do as well as they did on the exercise at all. They were much better than my expectations ... Jodi ... all that group just worked without giving up, even if they were having troubles -- they just kept working (Teacher Sort Task Interview A, 3).

These observations are further supported by a classroom observer in his summary notes following the Shadow Study:

> Jodi worked consistently today as she has for the five weeks I have been here. Only one day did she act silly -- with Blair: He seems to be her favourite (Shadow Study A summary).

Another look at Jodi's behaviour is provided in Table 15. Although the data confirm that Jodi's behaviour was indeed visibly "desirable" overall, they also indicate that she exhibited visibly "inappropriate" and "unacceptable" behaviours, especially in mathematics TD settings. Ms. Thompson probably provided an insight into the source of much of Jodi's inappropriate behaviour in her comments during an interview following a language arts lesson:

> Ms. Thompson: I felt right there that I wish Jodi would just learn to wait one minute. I'm forever thinking that she always has to be the first one to get started ... when the Crocuses (Jodi's group) are the last ones to get directions, she can't wait any longer.
>
> Interviewer: And she does that often?
>
> Ms. Thompson: Yes ... she's become a fairly good student compared to the way she started out, because she had a very bad hearing problem, and a very important operation on her ears. I think maybe it's this, that she's just a keener. But she always wants to be given directions immediately.
>
> Interviewer: What do you do with Jodi?
>
> Ms. Thompson: I just put my hand on her shoulder, show her where to go, back to her desk.
> (Teacher Stimulated Recall Interview A, 1)

Jodi's behaviour is classified as visibly inappropriate or unacceptable because it often contravened Ms. Thompson's system of classroom management. The behaviour, however, was not very often deviant because it appeared to be work-related and to arise out of a need for assistance or guidance which Jodi felt. Ms. Thompson's policy of acting as "gatekeeper" on the children's worksheets probably exacerbated the situation for Jodi. (Earlier reference -- see p. -- has already been made to the restless nature of the pupils' behaviours while waiting for Ms. Thompson to check their work.) Furthermore, Ms. Thompson expected intrusive behaviour from Jodi. Again, during an

| Behaviour classification | TD Settings |  |  |  |  |  | NTD Settings |  |  |  |  |  | Both Settings |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | LA |  | Math |  | Combined[d] |  | LA |  | Math |  | Combined[d] |  | LA |  | Math |  | Combined[d] |  |
|  | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % |
| desirable[a] | 105 | 81.40 | 23 | 76.67 | 128 | 80.50 | 184 | 80.70 | - | - | 184 | 80.70 | 289 | 80.95 | 23 | 76.67 | 312 | 80.62 |
| inappropriate[b] | 23 | 18.60 | 6 | 20.00 | 29 | 18.24 | 34 | 14.87 | - | - | 34 | 14.89 | 57 | 16.08 | 6 | 20.00 | 63 | 16.28 |
| unacceptable[c] | 1 | 0.77 | 1 | 3.33 | 2 | 1.26 | 10 | 4.39 | - | - | 10 | 4.39 | 11 | 3.08 | 1 | 3.33 | 12 | 3.10 |
| total | 129 |  | 30 |  | 159 |  | 228 |  |  |  | 228 |  | 357 |  | 30 |  | 387 |  |

a. visible at 80%
b. visible at 10 - 15%
c. visible at 3%
d. includes tallies from other subjects

Table 13. Classification of Jodi's behaviour according to subject and setting (CASES A).

interview following a lesson, she mentioned that, while giving individual assistance to a boy, she heard someone call out:

> Ms. Thompson: When she called my name, I made a decision not to answer her, to finish with Philip. I heard her, but I thought, 'No, I have to finish with Philip ...'
>
> Interviewer: Who was it that called you?
>
> Ms. Thompson: I'm not really sure, I wasn't listening that carefully. I think it was Jodi, but I won't want to bet on it (Teacher Stimulated Recall Interview A, 2).

Although Jodi had improved as a student, she was not a high achiever. She attempted to obtain more assistance than Ms. Thompson was prepared or able to give her, even though Ms. Thompson recognized Jodi's needs.

The CASES data presented in Table 14 (see p.139) confirm that Jodi's Styles of behaviour were typically E and H in TD settings, and G in NTD settings. The data also reveal quite a high proportion (the highest in the class) of Style C ("passive, withdrawn, avoidant, and dreamy") behaviour. Although the data did not reach threshold visibility according to Spaulding's (1974) criteria, one classroom observer noted that on one occasion Jodi was "a daydreamer today" (Anecdotal Notes A, 2). Another classroom observer noted that Jodi was told to change her seat in class because she was one of a pair of "non-workers" (Anecdotal Notes A, 1). Such behaviours, combined with Jodi's typically quiet manner, suggest a possible link to her former condition of hearing impairment. Although the impairment had been corrected, perhaps these were acquired residual behaviours which were not wholly typical of Jodi's personality.

Somewhat surprisingly, in view of much of the information obtained on Jodi, Ms. Thompson saw her as something of a leader who could and did influence the behaviour of others, although there is no firm indication that Jodi deliberately exercised her power. During an interview following a language arts lesson, Ms. Thompson mentioned Jodi:

> Ms. Thompson: ... Jodi rather than the leader in that group (Crocuses), and if she says 'stake', they'll all say 'stake' ...
>
> Interviewer: And is that what you normally do?
>
> Ms. Thompson: ... No, her making a mistake does not bother me; it was the idea of the other children all repeating her.
>
> Interviewer: ... You said that Jodi is possibly the leader of that group. Could there be any other reason?
>
> Ms. Thompson: ... I think maybe there would be another reason, subconsciously, too. The fact that she, you know, this quick, quick, quickness all the time. And probably trying to get her to slow down and think before ... (answering). (Teacher Stimulated Recall Interview A, 1).

Some support for this view of Jodi may be inferred from the fact that she consistently ranked among the top three or four pupils in the class in behaviour Styles B and F in NTD settings, and Style B in TD settings. Styles B and F are composed of categories of behaviour which include being peer-oriented, socially assertive, and integrative. But since none of these Styles reached threshold visibility, these data do not in themselves represent strong supporting evidence. Other evidence suggestive of leadership qualities may be gleaned from the strength of Jodi's social contacts discussed earlier, however, and also from the ready and confident manner in which she approached and spoke to the classroom observer on several occasions in the course of the Shadow Study. Finally, during one of the samples of Jodi's behaviour taken for the Shadow Study, the observer noted that Jodi addressed Todd and asked him "Are you coming?", seemingly in order to have him accompany her as they left their classroom for a music lesson. The case for describing Jodi as a leader is not conclusive, but there is sufficient tentative evidence to suggest she had these latent abilities.

A detailed analysis of the Shadow Study narrative accounts of behaviour settings and specimen descriptions of pupil behaviour (summarized in Table 16) generally confirms much of what has already been said concerning Jodi. Throughout the Shadow Study day, her behaviour was consistent, and corresponded quite closely with her observed behaviours over the several weeks of this investigation (Shadow Study Summary). The slightly higher incidence of "inappropriate" behaviours and correspondingly lower "desirable" behaviours noted during the Shadow Study day compared with the longer-term CASES data (Table 16) was a result of relatively minor off-task behaviours on Jodi's part. For example, during the specimen description observation periods, Jodi was recorded as having "visually wandered" on four occasions, and on six occasions she interacted (verbally and inappropriately) with her classmates, and the observer -- on one occasion. Even the "unacceptable" behaviours were relatively insignificant acts of noncompliance with instructions given by Ms. Thompson to the whole class.

On occasion during the Shadow Study day, evidence of Jodi's more mature behaviours was recorded. During physical education (first period in the morning), for example:

> Jodi is much more bouncy and active when girls are in the middle ... even in all the excitement and yelling, she does not cheer or yell -- just a lot of bouncing up and down and smiling (Shadow Study Notes A).

Yet she enjoyed the game, as indicated in the Pupil Interview when she mentioned that she liked dodgeball best when the boys were in the middle because she liked hitting Blair (with the ball).

| Classification of behaviour | Threshold vis % | CASES data % | Shadow Study % |
|---|---|---|---|
| desirable | 80 | 80.62 | 77.27 |
| inappropriate | 10-15 | 16.28 | 19.70 |
| unacceptable | 3 | 3.10 | 3.03 |

Table 16. Classification of Jodi's behaviour according to actual CASES data, and a CASES analysis of the Shadow Study specimen record data.

Even though she made 23 social contacts with other children in the course of the day, these were all quiet, private interactions, leading to little disruption in classroom events. Jodi's on-task behaviour was particularly notable during reading, an activity she seemed to enjoy and derive much satisfaction from. This pleasure was indicated by her behaviour during the library period when she showed her chosen book to the classroom observer, and by her comments during the Pupil Interview:

> Interviewer: What are some of the things in your classroom that you really like?
>
> Jodi: I like writing on the chalkboard, and I like drawing, and I like reading to the teacher.

and later:

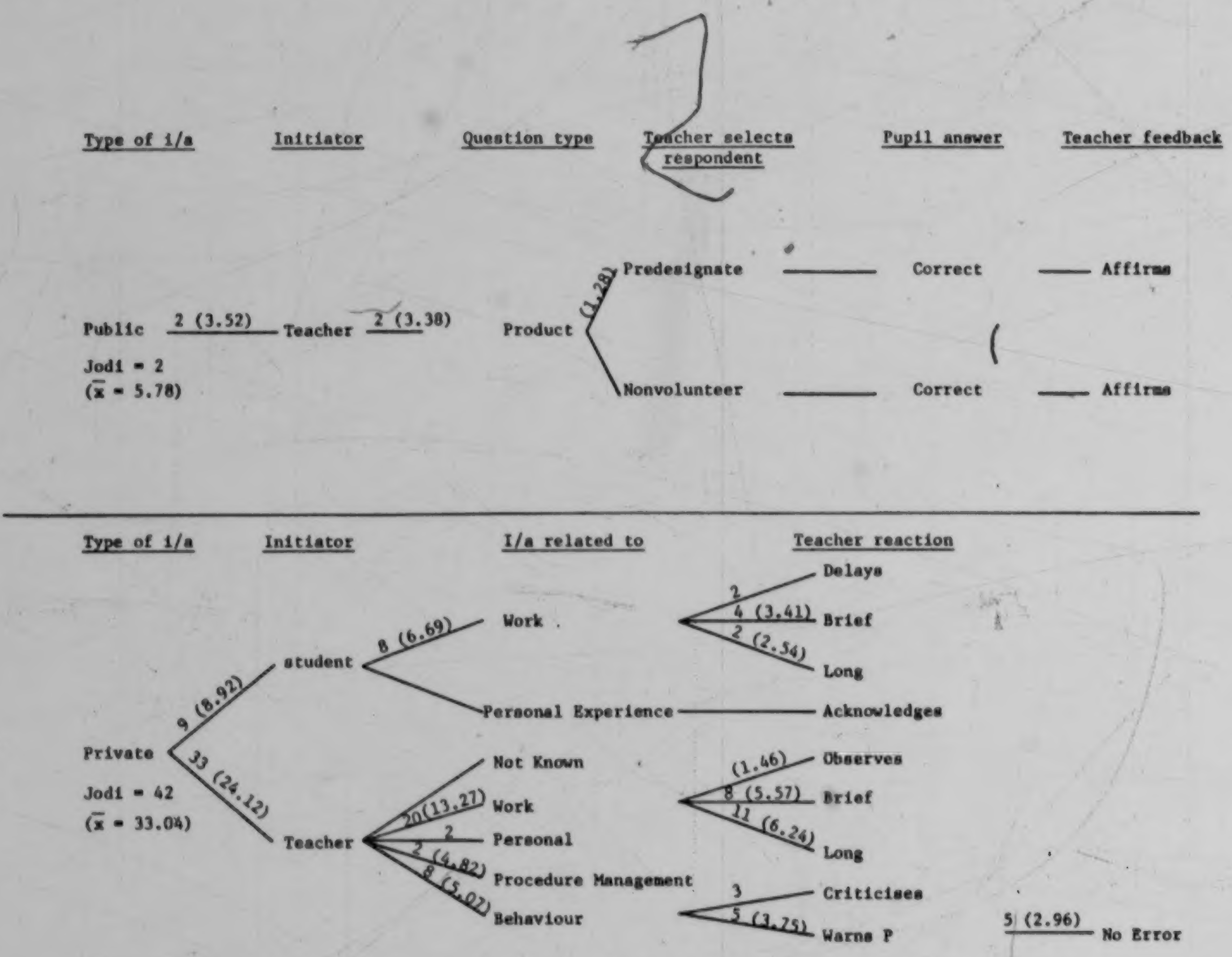
> Interviewer: If you were to pick the one thing from all of today that made you the happiest at school, what would it be?
>
> Jodi: Drawing and reading.

While reading, whether from a storybook or items on a test-sheet, Jodi frequently put her face very close to the reading material, as close as 10" and even 4" from the print. Yet when questioned during the Pupil Interview she denied having sight problems of any kind.

Behaviour displayed by Jodi which might be termed inappropriate included her non-work related social interactions and her improperly timed requests for Ms. Thompson's assistance or attention. The type of behaviour exhibited by Jodi which might be classified as unacceptable was typically resistant behaviour of a fairly minor nature. During the Shadow Study, the observer recorded that, while the pupils were at their desks, Ms. Thompson gave the command for the children to put their heads on their desk-tops, but Jodi did not comply. Later, Ms. Thompson called on the children to "sit properly", but Jodi -- although at the appropriate level -- was "actually sitting on her heels, toes on chair top."

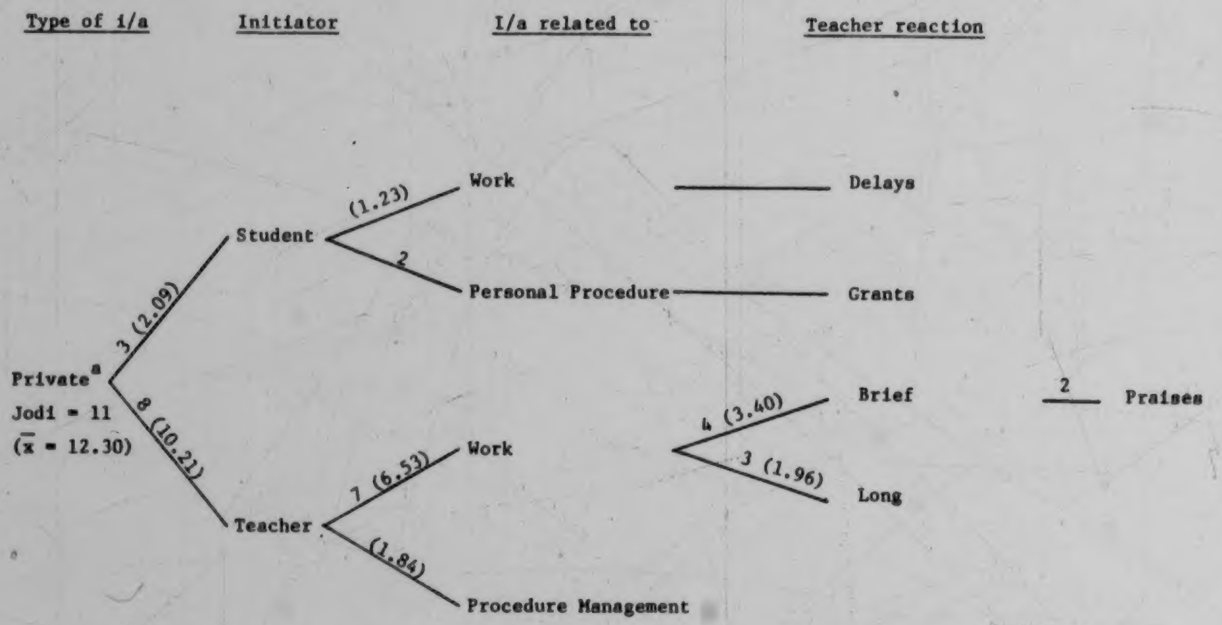
Besides interacting with her classmates, Jodi also shared in the many pupil-teacher interactions which took place in Room 1. In 10 language arts and three mathematics lessons, Jodi interacted 55 times (class mean = 51.89) with Ms. Thompson (DICOS A). From Figure 9 it is seen that 44 of these occasions were in language arts, of which 42 were private interactions mainly initiated by Ms. Thompson. Whether initiated by Jodi or her teacher, most of the interactions were work related. On eight occasions, however, Jodi was either warned or criticised by Ms. Thompson for her behaviour.

In three mathematics lessons Jodi only interacted privately with Ms. Thompson. She did so on 11 occasions, eight of which were initiated by Ms. Thompson (Figure 10). Seven teacher initiated interactions were


Type of i/a
Initiator
Question type
Teacher selects respondent
Pupil answer
Teacher feedback
Public
2 (3.52)
Teacher
2 (3.38)
Product
(1.28)
Predesignate
Correct
Affirms
Nonvolunteer
Correct
Affirms
Jodi = 2
(x̄ = 5.78)
Type of i/a
Initiator
I/a related to
Teacher reaction
Private
9 (8.92)
student
8 (6.69)
Work
2
Delays
4 (3.41)
Brief
2 (2.54)
Long
Personal Experience
Acknowledges
33 (24.12)
Teacher
Not Known
20 (13.27)
Work
2
Personal
2 (4.82)
Procedure Management
8 (5.02)
Behaviour
(1.46)
Observes
8 (5.57)
Brief
11 (6.24)
Long
3
Criticises
5 (3.75)
Warns P
5 (2.96)
No Error
Jodi = 42
(x̄ = 33.04)

Note: Links with no figure showing represent N = 1. Bracketted figures = class mean > 1.00.

Figure 9. Nature of the public (class N = 156) and private (class N = 892) interactions between Jodi and Ms. Thompson in 10 language arts lessons (DICOS A).


Type of i/a
Initiator
I/a related to
Teacher reaction
Private[a]
Jodi = 11
($\bar{x}$ = 12.30)
3 (2.09)
8 (10.21)
Student
Teacher
(1.23)
2
7 (6.53)
(1.84)
Work
Personal Procedure
Work
Procedure Management
Delays
Grants
4 (3.40)
3 (1.96)
Brief
Long
2
Praises

[a]There were no recorded PUBLIC interactions (class N = 21) between Ms. Thompson and Jodi.

Note: Links with no figure showing represent N = 1. Bracketted figures = class mean > 1.00.

Figure 10. Nature of the private (class N = 332) interactions between Jodi and Ms. Thompson in three mathematics lessons (DICOS A).

work related, and two of those resulted in praise for Jodi. From Figures 9 and 10 it is seen that Jodi's interactions with Ms. Thompson were mainly private, teacher initiated, and work related. The number of Jodi's private interactions was generally greater than the class mean, but the number of her public interactions was less than the class mean.

Perhaps it would be proper to capsulize Jodi's behaviour by briefly relating the events of the Shadow Study summary and the Pupil Interview. Although Jodi had first experienced a full, busy, and intellectually challenging day at school, when approached by the Shadow Study observer to arrange the Pupil Interview, she readily agreed, explaining that the babysitter who was expecting her would not worry, and that Ms. Thompson would telephone her. Then, at the end of an interview lasting forty minutes, she showed no sign of reticence or impatience, but talked quite animatedly about school and said she had had a happy day at school (Pupil Interview A). The Shadow Study observer described this as a typical day for Jodi, and his final comment was: "Good, happy day for Jodi!" (Shadow Study Summary A).

## Discussion

Braun (1976:206) has presented a figure illustrating "the flow of the behavioural cycle" between teacher input and learner output (see Figure 2, p. 32). For this case study only, Braun's model will serve as the basis for a graphic illustration of factors which appear to have a significant influence on Jodi's educational experiences.

An essential element of Braun's figure is the input into the learner's performance based on his own self-expectation. While recognizing the importance of this component and the value of Braun's contribution, it seems that a more realistic paradigm of the behavioural cycle should take into account changes which occur in the teacher, the learner, and even the interaction context over time. Such a concept of teacher-pupil classroom interactions might be more appropriately termed a behavioural "spiral" rather than a cycle. In terms of benefits to the learner, the spiral may be seen to change levels according to the general successes of the learner.

Building upon Braun's (1976) model, Figure 11 is offered as a graphic illustration of factors which have been extracted from the data contained in this case study, and which seem to have significance in the behavioural spiral involving Jodi and her teacher. The model is intended to convey a time sampling of the behavioural spiral beginning in September, 1975. Thus, Figure 11 should be read from the top left as though entering the spiral at that point in time, with the expectation that the spiral will continue through to June, 1976 and, for Jodi, beyond and into the future. Due to the timing of the Westham investigation there is, of course, considerable speculation concerning the factors identified early in the spiral. The factors identified later are offered with more confidence.

From Figure 11 it is seen that several factors have been suggested as having an effect on Jodi's classroom behaviours early in the school year. Of these factors it appears that the most influential were Jodi's impaired hearing, her moderate academic attributes, her positive home relationships, high parental expectations, and the socializing experience of kindergarten.

Together with other qualities and factors, Jodi internalized these elements to develop attitudes and propensities important to school life. She undoubtedly experienced learning difficulties because of her hearing impairment, her moderate academic attributes, and the developmental problems associated with her age. In her favour, however,

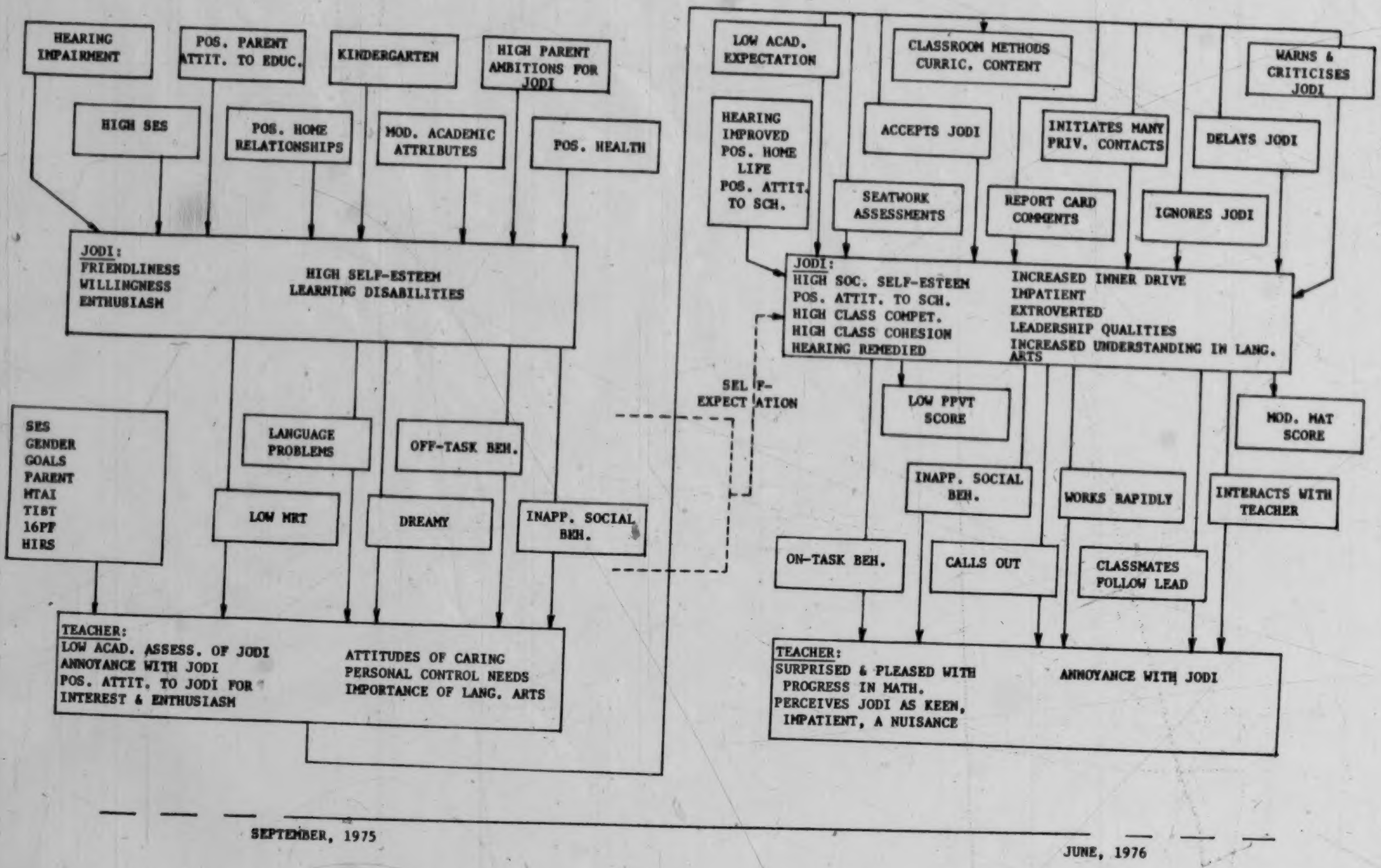

HEARING IMPAIRMENT
POS. PARENT ATTIT. TO EDUC.
KINDERGARTEN
HIGH PARENT AMBITIONS FOR JODI
HIGH SES
POS. HOME RELATIONSHIPS
MOD. ACADEMIC ATTRIBUTES
POS. HEALTH
JODI:
FRIENDLINESS
WILLINGNESS
ENTHUSIASM
HIGH SELF-ESTEEM
LEARNING DISABILITIES
SES
GENDER
GOALS
PARENT
MTAI
TIST
16PF
HIRS
LANGUAGE PROBLEMS
OFF-TASK BEH.
LOW MRT
DREAMY
INAPP. SOCIAL BEH.
TEACHER:
LOW ACAD. ASSESS. OF JODI
ANNOYANCE WITH JODI
POS. ATTIT. TO JODI FOR INTEREST & ENTHUSIASM
ATTITUDES OF CARING
PERSONAL CONTROL NEEDS
IMPORTANCE OF LANG. ARTS
LOW ACAD. EXPECTATION
CLASSROOM METHODS CURRIC. CONTENT
WARNS & CRITICISES JODI
HEARING IMPROVED POS. HOME LIFE POS. ATTIT. TO SCH.
ACCEPTS JODI
INITIATES MANY PRIV. CONTACTS
DELAYS JODI
SEATWORK ASSESSMENTS
REPORT CARD COMMENTS
IGNORES JODI
JODI:
HIGH SOC. SELF-ESTEEM
POS. ATTIT. TO SCH.
HIGH CLASS COMPET.
HIGH CLASS COHESION
HEARING REMEDIED
INCREASED INNER DRIVE
IMPATIENT
EXTROVERTED
LEADERSHIP QUALITIES
INCREASED UNDERSTANDING IN LANG. ARTS
SELF-EXPECTATION
LOW PPVT SCORE
MOD. MAT SCORE
INAPP. SOCIAL BEH.
WORKS RAPIDLY
INTERACTS WITH TEACHER
ON-TASK BEH.
CALLS OUT
CLASSMATES FOLLOW LEAD
TEACHER:
SURPRISED & PLEASED WITH PROGRESS IN MATH.
PERCEIVES JODI AS KEEN, IMPATIENT, A NUISANCE
ANNOYANCE WITH JODI
SEPTEMBER, 1975
JUNE, 1976

Figure 11. The Behavioural Spiral between Jodi and Ms. Thompson

she had high self-esteem; she was willing and enthusiastic in the classroom; she was a friendly, happy child; and she enjoyed school.

Jodi's behaviours and achievements reflected her internalized state. She experienced problems in her language arts work and achieved a low score on the MRT in September, 1975. Her behaviour was generally on-task, but she was also frequently daydreaming (perhaps induced in part by her hearing impairment), involved in inappropriate social interactions with her classmates, and in other ways obviously off-task. She remained a pleasant child, however, polite and eager to please her teacher.

Ms. Thompson brought her own set of referents into the classroom. These included items such as her instructional goals; her experiences as a parent; her attitudes toward and expectations for her pupils; her femininity; and her attitudes toward her role as teacher. Other factors which appeared to be significant in determining Ms. Thompson's classroom behaviours were her personal control needs, the value she placed on the teaching of language arts, and her "love" of teaching. Ms. Thompson experienced annoyance at Jodi's inappropriate social behaviours, and had a low opinion of her academic abilities. On the other hand, she was attracted by Jodi's pleasant nature, her interest, and her enthusiasm.

Ms. Thompson's general attitudes, perceptions, and values gave rise to certain decisions and behaviours concerning curriculum content and instructional methods to which all her pupils were exposed, and these are indicated at the top right of Figure 11. In addition, she exhibited several attitudes and behaviours in her dyadic relationships with Jodi, and these are also indicated in Figure 11. Of these factors, and in view of Jodi's apparent responses and eventual behaviours and achievements, perhaps the most important item was Ms. Thompson's attitude of acceptance of her pupils. This apparent attitude seemed to be sufficiently strong to reduce the possible negative effects of the situations wherein Ms. Thompson warned, criticized, ignored, and delayed Jodi. A positive instructional skill in this respect was Ms. Thompson's ability to engage all her pupils, including Jodi, in numerous private dyadic interactions. Ms. Thompson's low expectation for Jodi's academic achievement may have been a factor in Ms. Thompson's comments on and evaluations of Jodi as they appeared in Jodi's School Progress Report, but they appear to have had no negative effects on Jodi's performance on standardised tests.

In addition to factors emanating from Ms. Thompson, Jodi was affected by factors unrelated to the school environment. For example, medical treatment resulted in improved hearing for Jodi, and her positive attitudes toward home and school were maintained at a high level. At this time there was also clear evidence of Jodi's high self-esteem, her awareness of a high level of competitiveness as well as considerable cohesiveness among her classmates, and an increased drive and impatience in her approach to her seatwork. Finally, another set of factors which may have influenced Jodi, but for which there is no clear evidence, comprises her self-expectations -- especially as they relate to her earlier experiences.

Arising from this second sampling of Jodi's internalised state were the several behaviours and achievements noted in Figure 11. She exhibited visibly on-task behaviours, but maintained an evident amount of inappropriate and even mildly unacceptable behaviours. In addition, her frequently evident tendency to extroversion and exuberance resulted in her calling out during lessons. She also exhibited a certain amount of leadership which sometimes led other children into behaviours unwanted by Ms. Thompson.

Standardised tests written by Jodi at this time show some contradiction. In comparison with her classmates, Jodi's PPVT score was low, however, her MAT score was moderately high and exceeded Ms. Thompson's expectations for Jodi. The PPVT and MAT cannot, of course, be directly compared and the reason for the discrepancy is not clear. If both scores are to be accepted at face value, then apparently Jodi was achieving above the level indicated by her PPVT score. In fact, Jodi's rank in class based on her MAT score was considerably higher than that expected by Ms. Thompson.

Jodi's unexpectedly high achievement was particularly noticeable in language arts, but this was not commented on by Ms. Thompson. Ms. Thompson did, however, express surprise and pleasure at Jodi's progress in mathematics. She also expressed annoyance at Jodi's impatience and insistence in seeking attention in class, and complained that Jodi's inaccurate called out responses sometimes led other pupils into unwanted behaviours. Ironically, these were the very responses likely to be encouraged by Ms. Thompson's pressure on students to be quick in completing their worksheets and other assignments. The situation was exacerbated by Ms. Thompson's practice of acting as "gate keeper" in marking all assigned seatwork before allowing students to proceed.

Jodi had a happy disposition and she enjoyed school. It appears, however, that her academic progress was not recognized by her teacher, and that her academic achievement may not have reached its potential because of both this factor, and her teacher's methods of realising her own personal control needs.

### The grade three classroom: Room 8

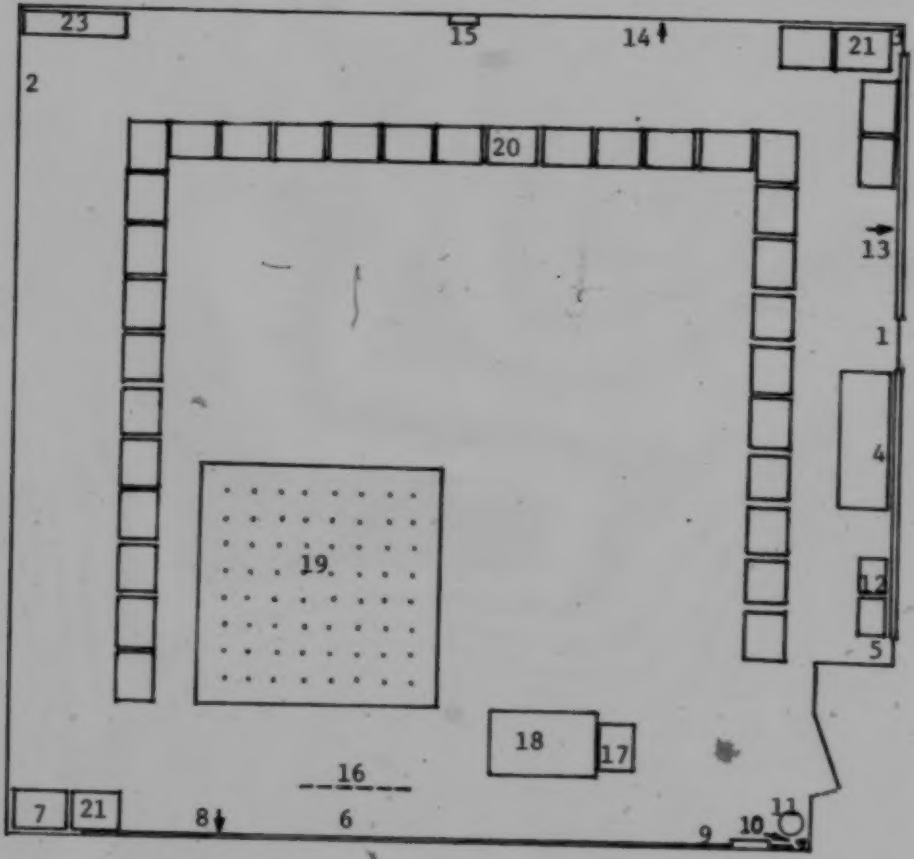
Room 8 was one of the "inside" classrooms, part of the central block of Jamieson school (see Figure 5, p. 93) and, although quite a large, rather square room, it lacked storage space or any special ancillary area, and could not have comfortably held more than the 31 children in Ms. Morton's class. Even so, one of the investigators was favourably impressed on his first visit to Room 8 and noted that "this is an attractive, colourful room -- warm-looking and inviting" (Anecdotal Notes B, 1).

The room was bright and cheerful, being decorated with a tasteful combination of light olive, lime green, light grey semi-gloss, and light flecked-buff colours. One wall contained the door and the two large windows (referred to previously) looking into the hallway. The floor was completely covered with yellow-brown speckled indoor-outdoor carpeting, and fifteen flourescent-lit ceiling panels provided sufficient light for all classroom tasks, leaving no part of the room cast in shadow.

Added colour and interest were provided by eleven large wall-posters advertising travel in Alberta, the letters of the alphabet on large wall-cards, a calendar, and seven learning station information posters and materials envelopes. The pupils had individual, light green metal desks with unattached chairs. The desk tops were finished with blond-brown, semi-gloss arborite surfaces, and the plastic chairs were in solid colours of yellow, grey and occasionally blue. The pupils' desks were arranged to form three sides of a square (see Figure 12). The fourth side was represented by the "front" of the room and was open to allow for easy access to the green chalkboard and Ms. Morton's dark brown desk, which was located quite close to the door. Also, abutting the open fourth side from the inside of the hollow square formed by the pupils' desk, was a bright, multi-coloured, nine-feet square, shag, patchwork rug. This rug was the gathering place for the class for much of the teacher-directed activity, whether as a total class or in groups.

Outside the square, and necessarily pressed close to the walls, were six "spare" pupil desks, some chairs, one work table, one four-feet-long set of shelves, and several cardboard boxes. In and around the cardboard boxes (and mainly under the work table) were stacks of egg-cartons; cereal and detergent boxes; cardboard tubes; plastic bottles; and a bird's nest. All these were materials which Ms. Morton encouraged the class to use in some of her project-work activities.

When the investigators first visited Room 8 they were able to witness some of the results of grade three's Science Fair. The Science Fair was an example of Ms. Morton's group project approach to learning. The children had been allowed to select scientific topics which they then


23
15
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KEY

1 - 7. Learning Stations
8. Chalkboard
9. Large Scratch Pad
10. Pencil Sharpener
11. Garbage Can
12. Storage Boxes
13. Windows
14. "Hutterite" Display
15. Clock
16. Suspended Screen
17. Flash-Card Storage
18. Teacher's Desk
19. Shag Rug
20. Pupil Desks
21. Spare Desks
22. Work Table
23. Book Shelves

Figure 12

Environmental Details of Room 8, Jamieson School

researched (using the library) for the preparation of reports and models. The completed projects had been put on exhibition for parents and other pupils and were generally of good quality. They included such topics as "Volcanoes"; "Horses"; "Transportation"; "Shells"; "The Sea"; and one quite technical and complicated model called "Computers" (definitely crafted with father's assistance).

More permanent displays maintained in the room included pupil paintings and mobiles; pupil essays, pupil letters, and "letters to the editor" from provincial newspapers protesting the Newfoundland seal hunt; pupil reports and pictures following a class visit to a Hutterite community; and topical news items posted by Ms. Morton. Finally, one list posted on the wall close to the door contained the names of classroom monitors and their duties -- the pupils were all monitors at some time on a rotation basis.

Entrance to the school library was through a door opposite Room 8. Ms. Morton took advantage of this in developing her own open approach to teaching by having a standing arrangement that enabled her pupils to use the library facilities at almost any time. In effect, this created a secondary learning area for grade three. Ms. Morton also allowed up to four students at a time to use the hallway immediately outside Room 8. As the hallway was quite wide and carpeted, this was a useful practise, especially for art work or projects requiring more space than usual. On infrequent occasions, sub-units of space were created inside the classroom by the re-arrangement of chairs and use of the work table. During their Thursday afternoon visits, the four parent aides typically subdivided themselves and their advisees from other class activities by drawing off desks and chairs to the sides of the room. Generally, the only other way in which the room space was sub-divided was when Ms. Morton brought pupils on to the shag rug.

The investigators were very conscious of certain of the ambient conditions of the room during their early visits. Particularly noticeable were the room temperature and temperature changes. In the early morning the thermometer registered 20°C, but by late afternoon the temperature often hovered around 26°C. The hot temperature seemed to coincide with room stuffiness, flushed faces, yawning, and generally lethargic behaviour on the part of many of the pupils. On a few occasions during the four weeks of frequent classroom observation, pupils were noticed paying visits to the washroom to wet their faces and return with wet paper towels. On these really hot occasions, the children would shed jackets and sweaters, and some of the girls rolled up T-shirts or blouses to expose bare midriffs.

A second readily noticeable feature of the environment during early visits was the almost continual hum of the air conditioning plant. The noise was not distracting, however, and after due acclimatisation the noise no longer impinged on the consciousness of the observers: one may assume that the children were similarly unaffected. Few other externally produced sounds seemed to penetrate into the room, and even classes of children passing along the hallway by Room 8's open door did not disturb classroom activities unduly.

Room 8 had little by way of instructional equipment permanently assigned to the classroom. Equipment could be booked, however, from the school's own stock of equipment. Room 8 was equipped with its own screen, and during their visits the investigators noted that film-strip projector, 16mm. projector, and tape-recorder were all put to use.

Other learning resource materials in Room 8 included several dictionaries and a thesaurus; class sets of books for language experience and mathematics; some teacher-constructed mathematics games; a microscope; a listening post; and such expendable supplies as paper of various kinds, felt pens, crayons, glue, scissors, and paint supplies. There were no other readers or other reference materials in the room, but perhaps this is explained by Ms. Morton's library-use policy (and the fact that the library stock was well maintained and included four sets of encyclopedias).

## The grade three teacher: Ms. Morton

### Introduction

At the time of this investigation Ms. Teresa Morton was twenty-five years old. She was born and raised as one of a family of four boys and two girls in one of the few large cities in Alberta. Until Ms. Morton graduated from high school, her mother spent her time as the family homemaker. Ms. Morton's father was a college instructor, and her mother had completed some years of college studies.

Ms. Morton attended one of the Alberta universities and graduated with a four-year B.Ed. degree, specializing in Social Studies. Her undergraduate studies were taken in a special program that involved more practical teaching experiences than the regular B.Ed. program. She had taught for three years in other Albertan cities, and she was in her second year at Jamieson school. Married, but with no children, Ms. Morton was enrolled in evening credit courses at university in order to obtain a graduate diploma in counselling.

Ms. Morton was a pleasant, attractive person in both manner and appearance. She had a generally soft, yet clear and easily heard voice, but in isolated instances of extreme frustration, she could be moved to raising her voice to an almost shrill shout. From Table 17, however, it is seen that the children of Room 8 were generally very satisfied with being in Ms. Morton's class. There was almost unanimous agreement with such MCI statements as: "Most pupils are pleased with the class", "Most children in my class enjoy school", and "The pupils enjoy their schoolwork in my class." In response to the OSAT question: "How is your teacher with you in school?", most children selected the "happy" response, although some chose the "neutral" response. Similarly positive responses were generally obtained on the PCAS factors indicating that, although some children dissented on some questionnaire items, there was general satisfaction on the part of the Room 8 students with being in Ms. Morton's class and having her as a teacher.

Ms. Morton was quite clear in defining her most important task as a teacher as that of promoting learning "in basic areas -- reading, arithmetic, etc. -- also in social areas" (Teacher Interview B, Part 1). She elaborated that the groundwork of teaching is in the areas of affective social development of the child, both as a social being and as an individual. She attempted to promote social development through the use of partnerships and small groups for certain learning tasks. But she also believed in fostering self-esteem by encouraging each child to perform to his/her full capabilities, by discouraging children from following her blindly and never asking "why?", and by the frequent use of positive reinforcement.

| Instrument | Factor | | | | | Complete Instrument | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Title | Keith's score | (max) | Class mean | (SD) | Keith's score | (max) | Class mean | (SD) |
| MCI | satisfaction with the class | 27 | (27) | 24.55 | (2.42) | 85 | (135) | 98.87 | (7.31) |
| OSAT | student-instruction interaction | 76 | (84) | 72.30 | (4.39) | 101 | (110) | 98.68 | (6.45) |
| PCAS | interest in school work | 5 | (6) | 4.23 | (1.38) | 57 | (84) | 58.55 | (10.16) |
| | attitude to class | 15 | (16) | 13.45 | (3.07) | | | | |
| | relationship with teacher | 3 | (6) | 4.26 | (1.54) | | | | |

Table 17. Attitudes held by Ms. Morton's pupils, including Keith, toward selected class, instruction, and teacher factors.

Grade three's classroom rules and routines generally supported Ms. Morton's stated philosophy. Much freedom of movement and individual responsibility were allowed. Children frequently left their desks in non-teacher directed settings in order to get or give assistance from or to classmates. Also, they were allowed to leave the room without special permission in order to use the washroom, simply by placing their initials on the chalkboard. Even leaving the room for a drink at the water fountain in the hallway or just to "get out and take a break" was allowed, after permission had been solicited. Ms. Morton believed that "children have rights and should be treated as people -- (although) this does not imply permissiveness" (Teacher Interview B, Part 1). She went on to point out that teachers have rights, too, which the children should learn to respect -- "I have a theory that kids adjust to teachers, too."

In order to help promote her educational goals, Ms. Morton made much use of group work and projects. Also, every Thursday afternoon, three or four parents came into the room to help individual pupils with spelling and reading tasks. Another device to promote individual learning was the use of interest or activity centres located at various places in the room. These centres contained materials designed to stimulate interest, and instructions for carrying out tasks which would promote learning. Each centre was completely self-contained and did not require the teacher's direct or full-time surveillance.

It was Ms. Morton's idea to establish a "Friday Box" into which all misplaced or "left out" articles were kept, to be reclaimed by the pupils only on Friday afternoons. But it was the children who decided on a class monitor system to control the noise and activity which followed entry into the room at the beginning of morning and afternoon sessions. The children also made the decisions concerning the nature of the punishment that should be meted out to transgressors of classroom rules.

The children were sometimes allowed to help decide what direction a particular lesson would take. This was done by placing the alternatives (sometimes including pupil suggestions) before the class, and taking a class vote. In such situations, Ms. Morton was at pains to be fair, and to make this apparent to her pupils.

The general curriculum that Ms. Morton followed was a combination of what she was required to do by the school district authorities, and what she opted to do. She commented that if she did not want to do a certain unit, she saw no point in doing it. In science, for example, she taught what she felt interested in doing -- "I haven't even looked at the curriculum guide this year so I don't know if I'm on or off (the prescribed course of studies)."

The evaluative comments made on Ms. Morton and presented above were based on her interview statements and on actual observations of her classroom behaviour. Further support for these comments may be gathered from Ms. Morton's responses to the TIBT, the 16 PF questionnaire, and the MTAI. The detailed results of these instruments are contained in the Appendices, only the most dominant traits and pertinent factors will be reported here.

The TIBT classified Ms. Morton as predominantly System 4. According to Harvey (1966), this implies that she is:

1. relatively free of extreme evaluations or extreme acceptance-rejection behaviour;
2. generally not dependent on authorities as guides for what she should believe and do;
3. in possession of a large repertoire of methods for solving problems; and
4. quite complex, having a differentiated cognitive structure.

Harvey's (1966) summary description of a System 4 person seems to fit Ms. Morton very well:

> The overall impression is one of complexity of thought and feeling. Depth of connotative implications rather than superficial statements is most typical of those subjects. They tend to show novelty and appropriateness and to synthesize the many differentiations they make.

According to the TIBT, Ms. Morton's secondary classification was in System 3. Concerning a System 3 person, Harvey says, again in summary:

> The overall impression generated by the response to System 3 persons is one of positive attitude toward situations and ideals which are beneficial to people.

Both of these summary statements help to characterize Ms. Morton and point to an explanation for her classroom rules and operating procedures.

The results of the 16 PF questionnaire add the following capsule descriptions of Ms. Morton. She was "extremely experimenting and group dependent"; and "strongly out-going, happy-go-lucky, expedient, adventuresome, imaginative, and forthright." But perhaps the most revealing comments are contained in Ms. Morton's actual responses to the TIBT. She stated that she does not believe that there are "good and bad people", and also:

> I feel that people are good and given the proper opportunities and environment will choose an appropriate way of life. I personally feel that many people never really understand their behaviours or actions. I feel we have a lot of knowledge about many things but very little in regard to knowledge of ourselves and others in relationships (TIBT Response Booklet B).

In the next section Ms. Morton's goals and classroom procedures are presented and analyzed for consistency and effectiveness. A few selected items will be discussed fully in order to help explicate the link between Ms. Morton's statements and the operationalization of her goals.

### Goals

When asked what she, as a teacher, considered her most important tasks to be, Ms. Morton replied:

> To promote learning ... in basic areas -- reading, arithmetic, etc. -- and also in social areas. I think there's a real responsibility to promote growth in the child in terms of what he thinks of himself, and to try to get each child to perform to his fullest (Teacher Interview B, Part 1).

Later in the interview, the interviewer offered the following clarifying restatements: "So ... your main function is more in the area of the affective social development of the child." Ms. Morton responded:

> I think that is the groundwork. I think if you are working in that area (affective social development), the other comes quite easily. I don't think it is more important -- I think it is just necessary ... I don't think a child learns much if he feels pretty bad about himself -- pretty negative about himself.

Ms. Morton made it clear that, although social-emotional goals were not more important than the basic academic subjects such as reading and arithmetic, they were at least as important. Ms. Morton's stated educational goals for her pupils, gleaned from interviews conducted with her, have been summarized as follows:

Social goals

- cooperation
- understanding human behaviour
- friendship
- responsibility toward others
- social skills ("getting along with others")

Emotional goals

- independence
- ability and willingness to express feelings
- improved self-concept
- enjoyment of school
- enjoyment of learning
- responsibility for self

Academic goals

- learning "the basics":
    - language skills
    - reading - comprehension
    - writing
    - mathematics

- thinking skills:
  - concern for understanding

Ms. Morton identified the ability "to express feelings" as of basic importance in her classroom goals. She related the comparatively high incidence of mental disorders in North American society to the inability of people to deal with their emotions, and considered that it was part of a teacher's function to help young children to "express their feelings and feel quite comfortable" in doing it.

Ms. Morton considered that, in general, her pupils were achieving the goals she had for them. She noted that parents had informed her that children in her class enjoyed their school activities and had positive attitudes towards school. She commented that she was "really pleased" with the development of the pupils' thinking skills. And she considered that "socially they have come a long, long way" in the course of the year. She also noted her pupils' improvements in other goal-based behaviours, although she admitted to some pupils exceeding her goals, as well as others who fell short.

## Curriculum content and organization

Ms. Morton generally felt quite comfortable in following the curriculum guides and in using the materials advocated and supplied by the provincial department of education and the Westham school board. But she did not seem to feel constrained by these prescriptions: where she considered it desirable or appropriate, Ms. Morton did not hesitate to adapt, supplement, or ignore the official curriculum materials. The content and organization of her curriculum were obtained from discussions with Ms. Morton and from observation of her teaching and are outlined below:

Subjects

- reading
- language arts (including creative writing and spelling)
- mathematics (mainly arithmetic)
- social studies
- science
- physical education
- music (taught by subject specialist)

Timetable example:

| | |
|---|---|
| 8:40 | reading |
| 9:15 | creative writing |
| 9:50 | RECESS |
| 10:05 | physical education |
| 10:40 | social studies |
| 11:15 | LUNCH |
| 12:30 | language arts projects |
| 1:10 | and discussions |
| 1:45 | RECESS |
| 2:00 | math |
| 3:10 | SCHOOL OUT |

The reading and language arts programs were largely determined by the school district, and were based on materials supplied by the administration. The programs emphasized language experience, involving much creative writing, to which Ms. Morton added individualized reading using school library materials. Spelling and reading aloud were activities with which the parent aides assisted on Thursday afternoons, working with children on a one-to-one basis. The mathematics program was based on a Science Research Associates kit, although Ms. Morton admitted that "our math program hasn't been a really thrilling one with a lot of extras like geometry and fractions and all that -- it has been pretty basic" (Teacher Interview B, Part 1). In fact, she considered that her class was weak in mathematics skills and in prior experiences in mathematics and she had found it necessary to use grade two materials at the beginning of the school year.

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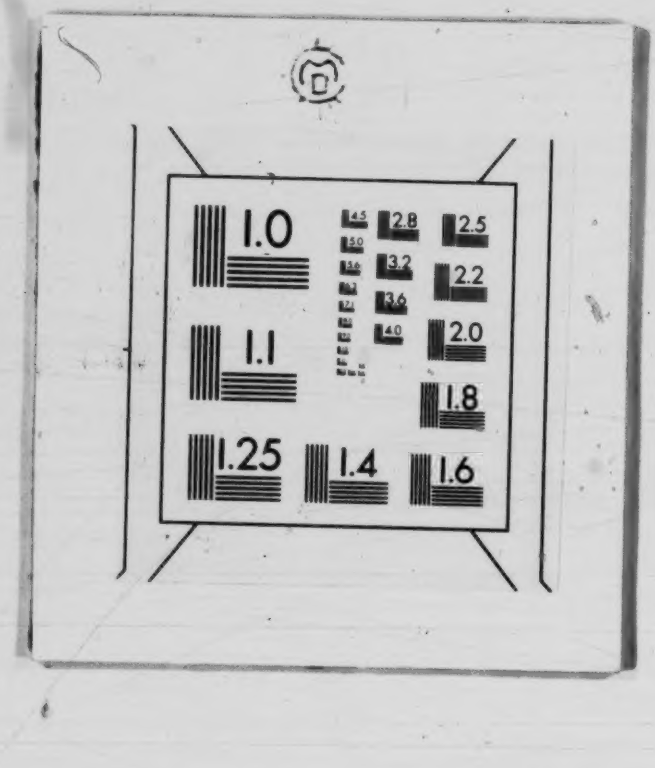

1.0
4.5
5.0
5.6
2.8
2.5
3.2
2.2
3.6
4.0
2.0
1.1
1.8
1.25
1.4
1.6

One third of the social studies program was derived from a new curriculum guide which used a special kit prepared by classroom teachers, and made much use of library resources. About another one third of the program consisted of units or projects devised by Ms. Morton. One project made a comparative study of Japan. Another, recently completed project featured a visit to a Hutterite community and the preparation of written materials, which were still in evidence on the classroom walls. The final one third of social studies was based on social issues, some of which were of broad societal interest (such as the "Save the Seals" campaign), and some which were of importance to the social structure and climate of Room 8. Ms. Morton considered the discussion of personal and group socio-emotional problems as part of her social studies program.

Science was an area in which Ms. Morton did not feel particularly knowledgeable, interested, or competent. Neither did she feel obligated to teach any specific science concepts. As she said:

> I really haven't followed anything much -- just what I've been interested in doing, what motivates the kids as far as Science Fair types of things. We did some experiments in a unit on measurement from our book that we are supposed to be piloting. I haven't even looked in the curriculum guide this year, so I don't know if I'm on or off (the prescribed curriculum). I just have the feeling that if I'm interested in doing it, they are going to be interested, and if I have to feel that I have to do a certain unit -- say a unit on electricity or something that I don't want to do -- I don't see the point (Teacher Interview B, Part 1).

Yet, in spite of this rather negative statement, the classroom observers had been impressed with the exhibits remaining in the classroom after the Science Fair had been held. Prior to this investigation, Ms. Morton's pupils had chosen science topics and had typically formed small groups of two or three to develop these topics into written and two- and three-dimensional projects. The exhibits included "Volcanoes", "Computers", "Transportation", and "The Sea" and, when all had been completed, they had been arranged to form an exhibition for the benefit of parents and other classes at Jamieson school.

Physical education was taught by Ms. Morton. At the time of this investigation the pupils were practising the activities involved in the Canada Fitness Test. Music was taught by a specialist teacher and seemed to be rather loosely organized program which included the singing of popular children's songs and listening to records, some of which the children brought to school.

The timetable was more flexible than it appears as presented above. Apart from music and physical education, which had to dovetail with the general school timetable, Ms. Morton felt quite free to arrange her daily program according to her own preferences. She preferred to begin each day with reading because she enjoyed that activity. Mathematics, which she enjoyed less, she usually deferred until the afternoons. When the pupils were working on projects, she often allowed the activity to run into consecutive lessons.

## Instructional methods and policies

Most of the instructional methods and policies adopted by Ms. Morton reflected her concern for the socio-emotional aspects of classroom life. For example, because friendship and cooperating with others were important goals in her teaching, and because her pupils had shown deficiencies in these areas early in the year, Ms. Morton stressed small group and partner learning activities. On occasions, the decision to work alone or in a group was at the child's discretion, but sometimes

Ms. Morton insisted on group work for its value in developing social skills. A summary of the instructional methods and classroom policies acknowledged by Ms. Morton during teacher interviews or observed to be in operation in Room 8 by the classroom observers is presented below:

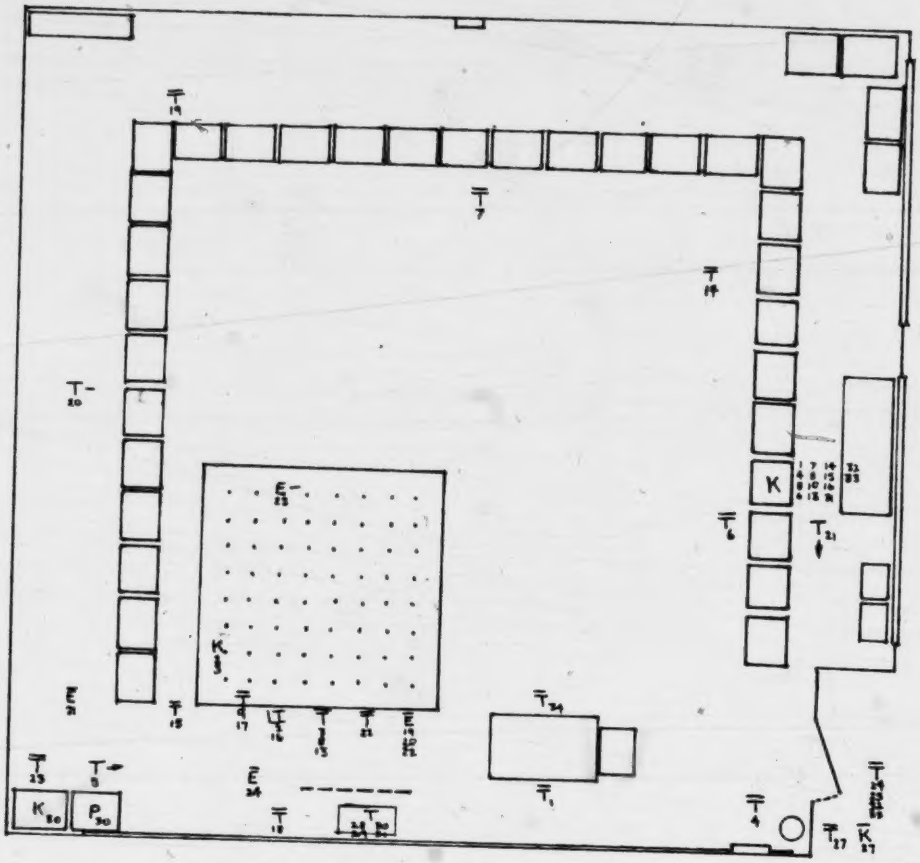
Methods

- individual seatwork
- partner and small group work and projects
- large groups based on both project interests and ability
- class discussion
- individual presentations to the class
- use of parent aides
- "show and tell"
- displays of pupil work
- audio-visual aids
- learning stations
- behaviour modification
- Dreikurs' class counselling
- pupil decision-making

Policies

- use of auxilliary learning spaces
- use of classroom rug for discussions
- freedom to move and converse within the classroom
- freedom to leave Room 8 upon "signing out"
- behaviour upon arrival in the classroom
- role of the "quiet monitor"
- use of grade 6 aide
- recognized deviant behaviours included:
    - · disturbing others
    - · tattling
    - · fighting

Two general types of classroom procedure were most frequently observed in Room 8. When doing seatwork or projects, children were often in their own desks (see Figure 12, p.159), but they also moved about quite freely and worked at the spare desks or tables, or on the floor. Figure 13 and Table 18 represent summaries of the classroom movements of the occupants of Room 8 observed during the Shadow Study day, and are presented as a sample of such movements. (It is not suggested that the



KEY

T = Ms. Morton

K = Keith

$\overline{K}$ = Standing

←K = Walking

$\boxed{K}$ = In Desk

$\lfloor K$ = Sitting on Floor

K- = Kneeling on Floor

E = External Proctor

P = Parent Aide

Subscripts = Locations in order of sampling.

Figure 13

Map of Ms. Morton's and Keith's classroom locations plotted every tenth minute throughout one day. (Shadow Study Notes B)

| Time samples in order | Locations of Pupils (N = 31) | | | | | | Locations of teacher | Notes |
|---|---|---|---|---|---|---|---|---|
| | in own desks | on rug | moving to/ from desks | dispersed desks | standing about/ sitting on floor | Out of room or in library (L) | | |
| 1 | 28[a] | | 1 | | 1 | 1 | standing at desk | |
| 2 | | 31[a] | | | | | seated at rug | |
| 3 | 2 | 28[a] | | 1 | | | standing at rug | Keith is only pupil kneeling. |
| 4 | 26[a] | | 1 | 2 | 2 (2)[b] | | standing at door | |
| 5 | 28[a] | | | | 3 (2) | | walking across room | |
| 6 | 23[a] | | 1 | 2 | 5 (2) | | standing near pupil | (T) responds to Keith's raised hand. |
| 7 | 12[a] | | 10 | | 9 (2) | | standing centre room | |
| 8 | 22[a] | | 2 | 1 | 6 (2) | | standing at rug | |
| 9 | RECESS — ALL PUPILS OUTSIDE | | | | | | standing on rug | |
| 10 | 28[a] | | | | 3 | | | |
| 11 | MUSIC LESSON CONDUCTED BY SPECIALIST TEACHER | | | | | | | Lesson held in lunch room all pupils sitting on stone floor. |
| 12 | | | | | | | | |
| 13 | 31[a] | | | | | | standing at rug | |
| 14 | 28[a] | | | 2 | 1 | | standing near pupil | |
| 15 | 30[a] | | | | 1 | | standing near rug | |
| 16 | 22[a] | 8 | | | 1 | | seated at rug | |
| 17 | PUPILS MOVING INTO ROOM, STANDING, SITTING AT DESKS FOLLOWING LUNCH BREAK | | | | | | standing on rug | Keith is in his own desk |
| 18 | | | | 31[a] | | | standing at front | Episodes #18-25: pupils instructed to disperse desks; exam. given by external proctor. (P) moves to answer knock at door. (P) talking with (T). Desks continue dispersed until episode #34. |
| 19 | | | | 31[a] | | | standing at rear | |
| 20 | | | | 31[a] | | | kneeling at side | |
| 21 | | | 1 | 30[a] | | | walking at side | |
| 22 | | | | 31[a] | | | standing at front | |
| 23 | | | | 30[a] | 1 | | standing in corner | |
| 24 | | | | 31[a] | | | standing in hallway | |
| 25 | | | | 31[a] | | | standing in hallway | |
| 26 | RECESS -- ALL PUPILS OUTSIDE | | | | | | | |
| 27 | 7 | | | 17 | 2 | 3[a] 2 (L) | standing in hallway | Episodes #27-34: four parent aides give individual assistance to pupils. Episode #27: (T) discusses recess behaviour problem with 3 boys. Episode #29: Keith on his way to collect book from his desk in order to work with parent aide (#30). |
| 28 | 6 | | 1 | 17 | 1[a] | 5 (L) | seated at front | |
| 29 | 7 | | 2[a] | 13 | 1 | 8 (L) | seated at front | |
| 30 | 6 | | 2 | 12[a] | 1 | 10 (L) | seated at front | |
| 31 | 7[a] | | | 8 | 1 | 15 (L) | seated at front | |
| 32 | 5[a] | | 1 | 13 | | 12 (L) | standing in hallway | |
| 33 | 6[a] | | 2 | 10 | 2 | 11 (L) | standing in hallway | |
| 34 | PUPILS GENERALLY ENTERING ROOM AND MOVING TO RETURN DESKS TO SQUARE LAYOUT | | | | | | standing at desk | |

a. location of Keith
b. bracketted figure represents number of pupils in each identifiable group

Table 18. Locations of pupils and Ms. Morton as sampled every tenth minute throughout one day (Shadow Study Notes B).

Shadow Study day was necessarily a "typical" day for Room 8. The presence of an external proctor to present the Metropolitan Achievement Test from 12:45 to 1:45 p.m., for example, although not inappropriate, was certainly not a typically regular occurrence.) Also from Figure 13 it is seen that Ms. Morton spent very little time at her desk, but moved about the room in order to observe and interact with the children more intimately during seatwork. For large group or whole class discussions, the pupils were usually seated on the rug, and Ms. Morton took up various positions -- sometimes standing, and sometimes seated on the floor, a chair, or a table-top, in front of the rug.

From Table 18 it is seen that there was much pupil movement in Room 8, and the children frequently worked in locations other than their own desks. (Episodes 18-25 should be excepted from this statement, since they represent the MAT administration period.) During the latter part of the afternoon (episodes 27-33) varying numbers of children were to be found in the library. The day of the Shadow Study coincided with the parent aides' weekly visit, and the expected pupil activities included spelling and reading tasks with the parents, and the resumption of work on previously assigned written reports. The decision of where to work, including access to the library facilities -- as indicated by Table 18 -- was at the pupils' discretion.

The second general organizational procedure observed in Room 8 was for the children to group together and be seated on the rug. This procedure was usual for TD instructional settings. As seen from Table 18, the whole class was gathered on the rug during episodes 2 and 3. Later in the morning (episode 16), Ms. Morton called a group of eight children to the rug for group instruction.

Ms. Morton had initially divided her class into two groups according to academic ability. The smaller number of more able students were known as the "black" group, and the larger number of less able students were called the "orange" group (orange and black were the Jamieson school colours). Later, the large orange group was subdivided into two groups. But children were not restricted to working only within these ability groupings: for projects and other assignments, they were usually free to group themselves according to social preferences.

Ms. Morton had established seven learning stations in Room 8 (see Figure 12, p.159)which, although used infrequently at the time of this investigation, were quite familiar to the children. The station activities typically included language arts (creative writing), mathematics (arithmetic), and artwork assignments.

In the event of children contravening Ms. Morton's classroom rules, she would usually draw their attention to their inappropriate behaviour. If the misbehaviour continued or was repeated, Ms. Morton would usually suspend the privilege that was being abused -- for example, pupils might be ordered back to their own desks. For more serious problems, Ms. Morton often conducted class discussions, seeking pupil opinions and encouraging the children's participation and advice. (Total class discussions, often followed by a class vote, were sometimes conducted by Ms. Morton in order to decide on teaching topics and activities.) Ms. Morton also followed her own advice concerning the expression of feelings and, upon provocation, sometimes told children that she was frustrated or that they made her feel angry. But she recognized the dilemma of trying to be just, and trying to deal with her pupils as individuals. As she said during the Teacher Interview (B, Part 1):

> I feel that they (the pupils) should be treated as people with rights ... I realize this is very difficult to do when you have thirty kids, particularly if 10 of them are misbehaving all at once -- you tend ... to forget they are people with rights and you tend to come down on them. I don't think I'm implying permissiveness with that. I don't think they have rights to get to me, and I am pretty adamant if they are and I will blow up.

Ms. Morton emphasized that classroom discipline and control were _her_ "problem":

> I don't believe in sending kids to the office unless it's been something that has happened on a school basis and involves someone from another classroom and I don't want to figure it out myself. I've never sent a child this year to the office for misbehaviour (Teacher Interview B, Part 1).

The institution of the "quiet monitor" was typical of Ms. Morton's approach to classroom control. The quiet monitor was a responsibility which her pupils shared in rotation. The function of the monitor was to encourage quietness and quiet behaviour at times when Ms. Morton was absent from Room 8. But it was the pupils who, early in the year, decided that noise was a problem and the appointment of a quiet monitor might solve the problem. The pupils also selected the punishment for noisy behaviour -- to stay in after school. Ms. Morton mentioned that she had tried, unsuccessfully, on several occasions to encourage the children to think of a solution to noisy behaviour that was not a punishment. Ms. Morton did not like to be oppressive, nor was she vindictive or retaliatory. She seemed to believe in the innate goodness of her pupils and often ignored unwanted behaviours although praising desirable behaviours. She seemed often to adhere to the principle that social problems were resolved in the natural course of events and, in any case, people would respond to the understanding and logic that resulted from discussing the problems.

## Discussion

In order to establish a link between Ms. Morton's stated goals and her classroom procedures and behaviours, the goals of "independence" and "the expression of feelings" have been selected for more detailed discussion. The selection of these two topics seemed particularly appropriate because of Ms. Morton's apparent concern for them, and because they seemed to underlie much of the observed classroom behaviour.

When asked how her class compared with other classes in the school, Ms. Morton was "a little bit afraid that they may be found insolent -- if taken the wrong way." She explained that she did not "want kids to follow me blindly and never say 'why?'." She considered that her pupils had "come a long way" in learning to solve their own problems and being independent: "They are now at a stage where they will go ahead in their work if they think they know how to do it without asking 'Should I do this?'" Furthermore, her pupils now questioned what they were learning and "whether they needed to do a certain thing at a certain time, because I do let them tell me how they feel about something" (Teacher Interview B, Part 1).

Another way in which the pupils were allowed to exercise their independence was in making decisions from among various alternatives, perhaps in selecting from certain learning activities or choosing to respond to one of several questions. In the frequently held whole class discussions, Ms. Morton felt that momentum and order were often maintained without her needing to "call the shots", although she admitted that at times "it just doesn't work out and we just have to resort to taking turns and one person calling the shots as to who speaks -- whether it's me or one of the kids in the leadership role" (Teacher Interview B, Part 1).

Further opportunity for independent thought and action was available to the children in the matter of moving about inside the classroom, and in leaving the room entirely. Freedom of movement within the room was partly related to a pupil's decision whether to work with a partner (or small group) or alone. But pupils were also free to move about provided they did not talk too loudly or disturb others. Freedom of choice to leave the room was principally related to use of the washroom, but Ms. Morton also felt that "if they really want to get up and get a drink, they are better off to go, usually, and get out and have a break and come back in than they are to sit there and drop out" (Teacher Interview B, Part 1).

Other documents provide mixed evidence of support for Ms. Morton's goal of independence. The classroom observers' notes both contain references to children leaving the room after having simply written their names on the chalkboard, and without having solicited prior permission from the teacher. This was apparently common practice for the children and did not seem to be particularly abused. There were recorded instances of doubt, however. One observer noted that during a reading period, two girls from the non-teacher directed group repeatedly left the room without permission although "They sometimes put their name on the board before leaving" (Anecdotal Notes B, 2). On another occasion, an observer learned that a boy who had left the room to visit the washroom further practised his independence by climbing on top of the toilet cubicles: he was apprehended by the principal (Anecdotal Notes B, 1).

There were many classroom situations where independent actions and behaviour on the part of the pupils were accepted by the teacher and recorded by the classroom observers. During class discussions held on the rug, for example, pupils who felt so inclined were allowed to leave the rug and sit in their own desks (see Table 18, p. 175). On one occasion, while a class discussion concerning a specific incident of deviant behaviour was being held on the rug, Ms. Morton said that those pupils who did not feel involved could return to their desks, and several did so, although they maintained a watching brief on the continuing discussion. Table 18 also shows the large amount of independent movement by pupils during regular seat-work -- movement within the classroom, and movement outside to the library and hallway, as well as to the washroom.

One observer recorded instances of being greeted and approached by children in Room 8 in quite an independent, self-assured, and friendly manner. He also noted that "pupils continue to show a mixture of behaviours -- sometimes very mature and responsible; other times foolish, annoying, and lacking in concentration. But they do have the opportunity to 'be themselves', to use initiative, to exercise responsibility...." During an interview with a boy in Ms. Morton's class, the observer was informed that Ms. Morton treated her pupils like adults and she was appreciated for that (Anecdotal Notes B, 1).

Another observer noted a problem which arose from the pupils being left to use their independence. During a language arts lesson, pupils were assigned some desk work which many soon finished. They had not been given any instruction for further work, however, consequently as each child finished, he or she sought the teacher's attention to find out what to do next (Anecdotal Notes B, 2). On another occasion, the same observer reported that the teacher underreacted to pupils who were not working by asking "any problems?", even though she knew they were not working. The observer also noted that pupils out of their desks "seem to visit and socialize and do less work than those working at their desks" (Anecdotal Notes B, 2). Throughout the notes made by the observers of classroom interactive situations, there is frequent reference to lack of on-task behaviour and seemingly excessive noise which was often, although not always, a cause for the teacher to remonstrate.

One of the results of Ms. Morton's classroom procedures was that she was not very highly rated for either her classroom management skills or her instructional skills by the high inference coders (see Appendix J). It is suggested here that for Ms. Morton to have achieved her goals more fully, she needed to develop greater skills in withitness, overlappingness, smoothness, and momentum. Furthermore, greater and more appropriate use of persuasiveness (as defined in the High Inference Rating Scales -- see Appendix F) would have helped reduce the amount of deviant and off-task behaviours shown by Ms. Morton's pupils, although greater exercise of this quality may have reduced her effectiveness in attaining her goal of pupil independence.

All the events recorded above seem to support Ms. Morton's contention that independence was one of her educational goals, but she seems to overestimate the degree of desirable and appropriate independence shown by her pupils. Perhaps the most stringent test of pupil understanding and use of independence is when the teacher is not present in the room. On one occasion when Ms. Morton was temporarily out of the room, an observer noted:

> I was surprised at the task-oriented behaviour of Victoria and Debbie during the teacher's absence. Trevor had his head on his desk top for a long time. Carrie seems to do almost nothing except look around. Grant was with Terry -- they got work done, I think, but joked and interacted practically the whole time. Marni spent most of her time erasing marks on her desk, which she perhaps kept making (Anecdotal Notes B, 2).

The in-class notes of the observers support the general view that Room 8 presented many opportunities for children to practise and test their independence, and in some cases positive results were observed. There were, however, many occasions similar to that described above, which occurred even during the teacher's presence, and one wonders about the efficacy of the goal of independence as operationalized in this classroom. Ms. Morton stated that children have rights and she felt that "they should be treated as people with rights and not treated as sort of a lower class type of thing." And, although she did not think she was "implying permissiveness with that", it was difficult for an observer to conclude that much of the behaviour in Room 8 was a result of the exercise of desired, responsible independence on the part of the pupils rather than permissiveness on the part of the teacher.

The interview with the Shadow Study pupil provided another perspective of independence. According to Keith, the interview subject, he did not usually work very hard, but he worked his hardest "when we have to get something finished" (Pupil Interview B). In answer to the question "Could Ms. Morton do anything that would help you to do harder work, to get work done?", Keith replied:

> Well, she could put down on the board and then if she said that we will have to get this done and tomorrow we'll have a new one. If you don't get that done today it will go on your report card that you didn't. That kind of sometimes frightens us (Pupil Interview B).

Perhaps these attitudes of dependence on external authority were exactly those Ms. Morton wished to replace with attitudes of independence. But in the case of this student, there were intervening factors which must somehow be taken into account:

> Interviewer: Were you concentrating as hard as you could?
>
> Keith: Not really. The class was -- sometimes you notice it kind of noisy. I couldn't really work. When it's quiet I can really work good.
>
> Interviewer: Would you like it, do you think, if your teacher was to have a quieter class?
>
> Keith: Yes. Then everybody would get their work finished.
>
> (Pupil Interview B)

Ms. Morton considered that many mental problems stem "from feelings that haven't been expressed" (Teacher Interview B, Part 1). She thought that "if kids can learn at a fairly young age to express their feelings and feel quite comfortable in expressing their feelings, I think they are going to be a lot better off in the world than if they haven't." She included the expression of feelings with "social skills", which she equated in importance with language and mathematics as one of the basic skills to be taught in school. She wanted children to express their feelings in class and would have liked to have seen "some (pupils) ... open up a bit more in their feelings." The expression of feelings was of benefit, she implied, to onlookers as well as to those actually giving vent to themselves. And she considered that difficulty in expressing one's feelings "might even stem from home." She related the expression of feelings to self-concept, friendship, and solving inter-personal problems -- and related all of these to stress, wasted lives, and suicide in society at large. Ms. Morton's empathic approach in her interpersonal relations with students was noted and documented by the HIRS coders who accorded her a comparatively high score for empathy (see Appendix J). She did not, however, consider that her pupils had "the rights to get to" her, and if they did exceed certain limites, then she would exercise her own right to self-expression ("I will blow up").

In discussion with the interviewer, Ms. Morton provided an example of acceptable independence as well as the expression of feelings. She recalled that, following a mathematics lesson, she retained those pupils who had made some errors while releasing the remainder of the class to the library. One of those retained was the boy whom Ms. Morton rated the most proficient student in mathematics. This boy had made only one error in his mathematics assignment and challenged the teacher with "Why am I here?" Ms. Morton empathised "You don't feel like you should be here right now," and the boy agreed. But, because he had felt free to express his feelings, the boy stayed without resentment and learned that his error was in fact due to his own carelessness.

The classroom observers actually recorded few instances of pupils expressing their feelings. On one occasion, two boys told Ms. Morton that they were upset about the entry behaviour into the classroom of their classmates following the lunch break. The teacher called a class meeting on the rug, the two boys voiced their complaints, and other pupils entered into the discussion. According to one observer, "the discussion was full, participatory, and not teacher dominated" and, although there is no clear indication of the resolution of the problem, feelings and opinions were apparently expressed and placated to general satisfaction (Anecdotal Notes B, 1). On another occasion, two boys had been fighting, which resulted in one of the boys being upset and crying as he came into class following a physical education lesson. With the affected boy's permission, Ms. Morton proceeded to counsel both the boy and the entire class on the boy's interpersonal problems. The teacher asked the children to make suggestions for the improvement of relations and to express their positive feelings towards the upset boy. The children responded well and the boy was obviously comforted; unfortunately, in the process, a girl's name was mentioned in a somewhat derogatory manner. Other unpleasant comments followed as the children gave voice to their feelings of hostility and resentment towards the girl. The girl, in turn, was reduced to tears and could not be comforted. When, a short time later, the class left their room to visit another room, the unhappy girl absented herself from school and went home, not to return until the following day (Anecdotal Notes B, 1 and 2).

Perhaps because she held such a central and unique position, the person who most obviously, frequently, and publicly expressed her feelings was Ms. Morton. Part of Ms. Morton's teaching style, however, was to make frequent use of positive reinforcement techniques. It is difficult to record and possibly inaccurate to consider expressions such as "I like the way you are all helping today" or "I'm very pleased with the way you're trying, David" as true expressions of feelings, especially if they are being used as part of a positive reinforcement technique or for a ripple effect (Kounin, 1970). One observer noted:

> (The) teacher maintains ... (an) almost continual stream of positive reinforcement -- at times it seems rather forced and artificial. One wonders how the pupils perceive it ... (one boy) considers (the) teacher to treat pupils as adults, and he appreciates her for that (Anecdotal Notes B, 1).

Also, there was no systematic attempt to record non-verbal expressions of feeling, and these would call for even greater assumption on the part of the observer. Most readily noticeable, however, were the occasions when Ms. Morton voiced negative feelings such as "You frustrate me" (to the whole class); "I'm getting madder and madder" (to the whole class); and (to one pupil) "That really shocks and surprises me" (Anecdotal Notes B, 1 and 2). Perhaps the most obvious point to be made is that the public expressions of negative feelings by Ms. Morton seemed to have very little effect on the classroom behaviours of the pupils as a whole. But perhaps the true value of these utterances was (in Ms. Morton's terms) in the satisfaction and mental stability she was able to obtain through expressing her feelings.

One wonders to what extent it would be acceptable for pupils to give voice to their feelings. Presumably the public expression of hostile, violent, or other unmannerly feelings would be unwanted and not tolerated by the teacher. But what might be the reaction to a pupil expressing negative feelings as they were experienced by him/her in the course of a school-day, bearing in mind that there could be 30 or more children, all with feelings, in one room. The Pupil Interview notes provide some insight into this question.

It should be mentioned at the outset that the subject pupil (Keith) had positive feelings towards his teacher, his classroom, and his school:

> Keith: Ms. Morton, she never usually gets mad at us. She helps us a lot. I like the classroom ... (Pupil Interview B).

But in the course of the interview the pupil revealed feelings of annoyance:

> Keith: Well, yesterday I did all my work and the teacher -- I guess she handed out the sheet that had all the answers on one page. I did everything else. I was kind of noisy and she took my sheet away. Then she passed me the sheet that was all blank and I had the first page done, and I'd done everything in the whole book. Then teacher passed back my old one and I didn't get everything finished and I had to do a lot again (Pupil Interview B).

boredom

> Keith: Really bored, eh? When I've done lots of sheets of math and she just says "O.K. -- we won't do any more," then she changes her mind and we have to do more math. That makes me bored (Pupil Interview B).

frustration:

> Keith: When ... you've got one thing to do and then the teacher hands out another thing and you don't finish that thing.
>
> Interviewer; Does that happen sometimes?
>
> Keith: Yes, sometimes (Pupil Interview B).

also:

> Keith: There's one thing that we're not allowed to do that I would really like to do ... We like to chew gum (Pupil Interview B).

Perhaps such mundane pupil feelings are not sufficiently important to be expressed publicly, but they are very real nevertheless and may give rise to deviant behaviours. Even expressing their feelings may not satisfy the children's basic needs of order and reassurance. Perhaps Ms. Morton's class would have benefitted, not so much from the freedom to express their feelings as from a more orderly and purposeful atmosphere that would not give rise to negative feelings which needed to be given vent in whatever form.

## The grade three pupil: Keith Evans

### Influence of home and attitudes toward school

Keith Evans was born in a large industrial city in the northeast of England in late 1967. At the time of this study, Keith was eight and one half years of age and one of the younger children in his class. He was a good-looking, fair-haired boy of a little above medium height for his age, with a well-knit body. Fresh-faced, with an open manner and ready smile, he was generally pleasant and helpful both to adults and to his peers. On the day of the Shadow Study Keith was dressed in his usual fashion -- runners, ankle socks, jean shorts, and a "hockey" shirt advertising professional hockey teams. These were clean, quite neat and, in view of hot weather, very sensible clothes.

Mr. and Mrs. Evans, Keith's parents, were born and raised in England. Both had completed English secondary school education, leaving school at the customary age of fifteen. They had emigrated to Canada in 1972 with their three young children (two boys and one girl), of whom Keith was the eldest. Mrs. Evans spent most of her time as the homemaker for her family, while Mr. Evans was employed as an electrician at a Canadian Forces base in Alberta.

The parents did not have great expectations for Keith's academic achievements. They thought his current progress to be about the same as most other children the same age. They had begun his formal education by sending him to kindergarten for six months, later enrolling him in grade one at Jamieson school, but they expected his formal education to end with graduation from high school. Peering into the future, they expected that he would find work in "some kind of trade -- (perhaps an) electrical engineer or draftsman, as Keith really enjoys drawing -- or joining the (Canadian) Armed Forces, which he sometimes talks about" (PATES). On the whole they were positive concerning the benefits of formal education, and "strongly agreed" that schools were doing a good job. They had some reservations concerning the education system, however, which may be linked to some of Keith's experiences. They considered that some children always got "tough breaks in school," and Keith certainly had had his problems, both in his studies and in running foul of school rules. In the course of the current year, for example, Keith and a classmate were disciplined by the vice-principal for throwing stones. And in his first two years of school Kieth had been reprimanded on three occasions by the principal for misbehaving in class and on the school bus.

Two factors which may have a bearing on other matters to be discussed should be mentioned. Keith had a hearing impairment for which he was receiving treatment. Although poor hearing was not an evident problem for Keith, it may be related to his generally quiet, daydreaming manner, and to some of his low achievement performances in school subjects. The second factor was the number of times Keith was absent during the current school year. Keith was a healthy boy and had not lost a day of school in the whole year except for 27 days spread on either side of the Christmas holidays. The Evans had chosen this time to pay a family visit to England. Again, some of Keith's learning deficiencies may be related to material covered in class at that time.

According to the several factors reported on in Table 17 (see p. 164), Keith had extremely positive attitudes toward his class and student-instruction interaction. He scored the maximum on the MCI satisfaction with class factor, indicating that he agreed wholeheartedly with such statements as: "Most pupils are pleased with the class," "Most of the children in my class enjoy school," and "The class is fun." His score on the PCAS attitude to class factor was only slightly less, providing further evidence that he really enjoyed being in his class. His attitudes towards schoolwork (PCAS and OSAT factors) were similarly very positive. In the case of all the factors mentioned above, Keith's scores were above class mean scores.

In view of the very positive attitudes Keith appears to have had toward his class and schoolwork, it seems surprising that his perception of his relationship with Ms. Morton should have been so much less positive than those of his classmates.

Table 19 presents information concerning Keith's attitudes toward his home and school.

In spite of some of his responses to individual items on the SEI attitude to home factor, Keith seemed to have quite a positive attitude toward his parents and his life at home. This impression is supported by comments made during the Pupil Interview and by other factors reported in Table 19.

In response to SEI questions, Keith indicated that he had a lot of fun with his parents, and that his parents took his feelings into consideration. He also felt that his parents understood him and paid attention to him at home. This interpretation of his home life was supported by his descriptions of activities he took part in with his parents, especially with his father (Pupil Interview B). Also, his parents had shown sufficient interest to visit England with the whole family. And they had indicated an awareness of Keith's activity preferences and a consideration of his future in their parent questionnaire responses.

| Instrument | Factor | | | Complete instrument | |
|---|---|---|---|---|---|
| | Title | Keith's score (max) | Class mean (SD) | Keith's score (max) | Class mean (SD) |
| OSAI | general school attitude | 14 (20) | 16.45 (2.20) | 101[a] (110) | 98.68 (6.45) |
| SEI | attitude to home | 10 (16) | 10.32 (3.91) | 72 (100) | 61.29 (16.75) |
| | attitude to school academic | 12 (16) | 9.74 (3.24) | | |
| PCAS | attitude to school | 6 (6) | 4.84 (1.25) | 57 (84) | 58.55 (10.16) |
| | importance of doing well at school | 4 (10) | 7.90 (1.65) | | |
| | anxiety in the class-room | 3 (6) | 2.61 (1.75) | | |

[a] scores between 91 and 116 = positive response to school environment (Rivera, 1973).

[b] high score = less anxious.

Table 19. Attitudes of Keith and his classmates toward selected home and school factors.

Keith did have some reservations concerning home. He mentioned that his parents expected too much of him and expected him to do very hard things. He also mentioned that he got easily upset at home and, finally, that there were many times when he'd like to leave home. The thought and threat of leaving home seem to be common to many young children, however, and probably should not be taken too seriously. The matter of pressure from home to do well is probably of greater significance, and perhaps less easy to explain or discuss.

As the eldest of three children, Keith probably experienced the kind of pressure most first-born children are subjected to by most parents. It is typical for parents to have greater expectations for their first-born children than for subsequent off-spring. Apart from the vicarious sentiments that many parents have for their children, the eldest child is often looked upon and groomed by parents as an example for younger siblings to follow. Also, older siblings are often put in positions where they are held responsible for younger siblings. Although there is no direct evidence that these observations applied to Keith, there seems to be good reason to suspect that they did, and that they contributed to Keith's sense of negative pressure in the home situation. If such was the case, it could also help explain Keith's generally positive attitude towards school, for school could have provided a release from the pressures of home. Certainly the PCAS factors in Table 19 indicate that Keith was one of the less anxious pupils in his class, and was much less concerned about doing well at school than any of his classmates.

That Keith did not feel pressure in school, and did in fact have positive views of school is evident in his written responses in the questionnaires summarized in Table 19, and in his verbal comments during the Pupil Interview. Typical of his responses to questions concerning school were: "I like school. -- Yes" (PCAS); "School is fun. -- Always" (PCAS); "I often feel upset in school. -- Not like me" (SEI); and "How are you in school? -- Happy" (OSAT). Two responses to questions in the OSAT pose some problems of interpretation, however, especially when compared with the responses to a re-test of the same instrument administered 10 days later. To the question: "How do you feel about the noise in your school", (OSAT) Keith chose the "Hateful" response; but on the re-test, Keith chose the "Neutral" response. Also, to the question: "How do you feel about everything in your school?" (OSAT), Keith chose the "Hateful" response; but on the re-test he chose the "Happy" response.

The two extreme negative responses, given in the same test, seem to be atypical for Keith and inconsistent both with the re-test responses and responses to questions on other instruments. It is quite possible that, for some specific incident or reason, he did have negative feelings towards school at a particular point in time that coincided with the administration of the first OSAT. During the pupil interview, for example, Keith mentioned specific events at school that bored or frustrated him or made him feel unhappy, but these events were related to his own class rather than the school as a whole:

> Interviewer: When you come to school in the morning and you see the school, do you feel happy that the school is there? Or do you wish it would disappear?

Keith : Sometimes if I was going to do something, then I decided to sneak out of it. I would take my lunch to school, then I wouldn't have to do it. Some things I don't like to do, and some things I do like to do. Like, school is one of the things that sometimes I don't like to do it and sometimes I do.

Interviewer: Generally, how do you feel about it?

Keith : I like it a lot. (Pupil Interview B)

Keith's positive attitude toward school had a definite focus as well as being a general feeling. During the pupil interview, the following dialogue took place:

Interviewer: ... (if) you never would have to come to school again, would you still come?

Keith : I would really like to, but if I never could ...

Interviewer: No, I don't mean that you never could, but if you didn't have to.

Keith : I would keep on going, because if I didn't go I wouldn't be able to memorize anything. Like, I wouldn't know very much about math or science. I wouldn't get an education or anything.

Interviewer: So school is important because ....

Keith : You learn a lot of things from it ....

Interviewer: ... Are there other kinds of things that are important for a person to learn that you learn at school?

Keith : How to be a good writer. What job you're going to get. What job you're good at. Like, if there's a question that's really hard ... if you were in school you would know what to do.

Interviewer: Do you think you learn things in school about how you get along with other people?

Keith : Oh yes, we learn that a lot ... (Pupil Interview B).

The degree of importance Keith placed on attending school, and the mature view he had of the purpose of schooling may be directly related to the views of his parents and to some of the parental pressure to do well. But the reality of school, from a child's point of view, relates most of all to his own classroom, his own teacher, and his classmates. The next section describes the more specific social setting of Keith's class.

The social setting

Keith shared his classroom environment with 30 classmates who generally seemed of happy and pleasant dispositions. With very few extreme exceptions, these children were very satisfied both with being in Jamieson school and in Ms. Morton's class. These statements are supported by the children's own written responses to questionnaires (see Tables 17, p.164 and 19, p.192), and by the anecdotal notes of the classroom observers. Also, according to these same sources, most children did not find schoolwork very hard or difficult, although there was a general sense of the importance of doing well at school. This latter attitude may be related to the generally fairly high SES rating of the class (a mean of 52.3 on the Blishen scale).

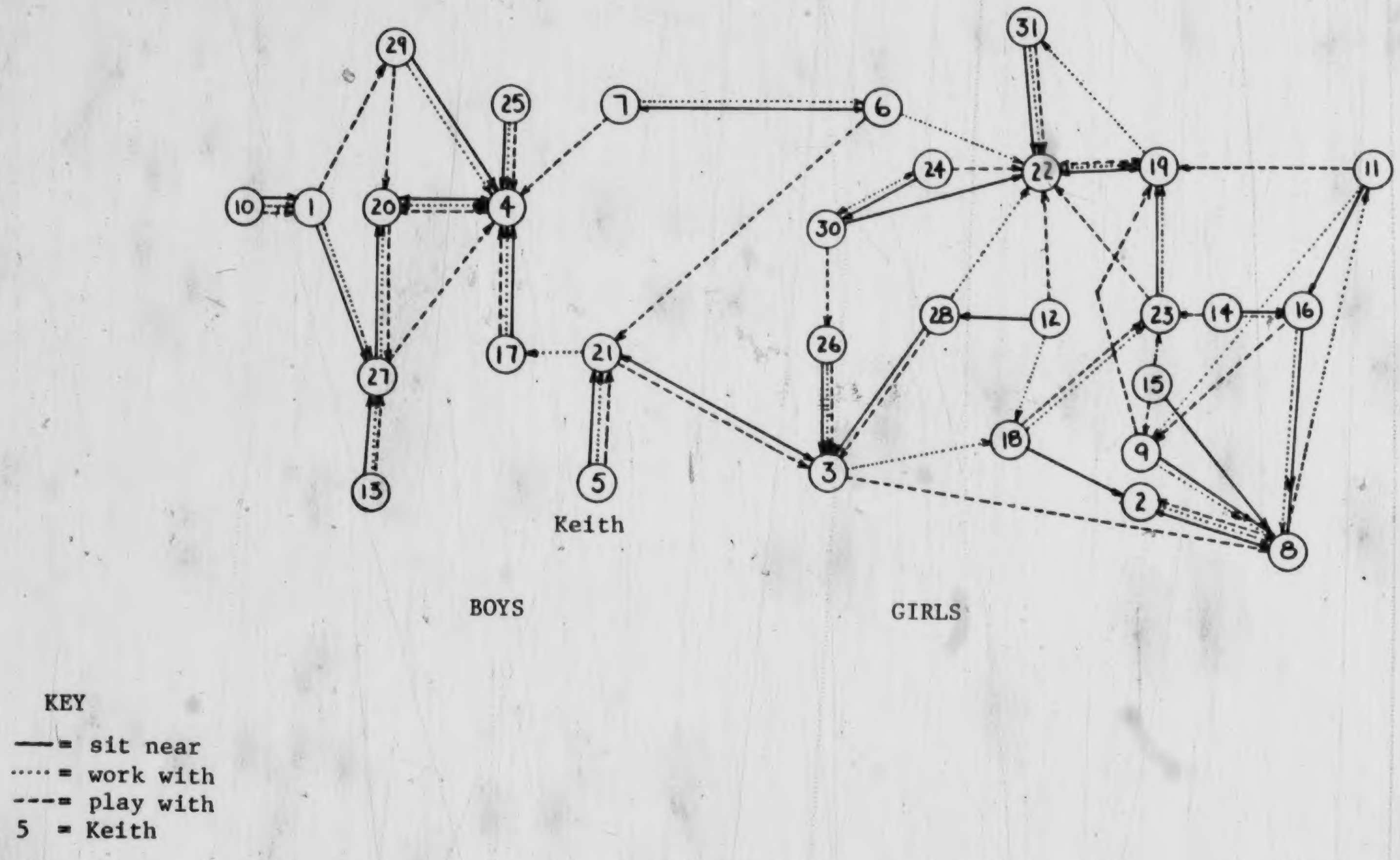
From Table 20, however, it is seen that many children in the class were quite conscious of friction and competitiveness in the class, and many pupils reported feeling quite anxious in the classroom setting. This feeling of anxiety seemed to be related more to the perceived importance of doing well and to some uncertainty concerning their peer relationships than to their relationship with Ms. Morton (which was generally rated high). Perhaps it was the sense of identity with their teacher and the unanimous assertion that "The class is fun"

(MCI) which helped the class with a fairly strong feeling of class group cohesiveness. It is also possible that Ms. Morton's group counselling discussions were having their desired effect.

| Instrument | Factor | | | | | Complete instrument | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Title | Keith's score | (max) | Class mean | (SD) | Keith's score | (max) | Class mean | (SD) |
| MCI | friction | 11 | (27) | 19.39 | (4.08) | 85 | (135) | 98.87 | (7.31) |
| | competitiveness | 13 | (27) | 21.39 | (3.98) | | | | |
| | cohesiveness | 23 | (27) | 20.74 | (4.33) | | | | |
| OSAT | interpersonal relations | 11 | (12) | 9.90 | (1.57) | 101 | (110) | 98.68 | (6.45) |
| SEI | social self | 8 | (16) | 10.07 | (3.75) | 72 | (100) | 61.29 | (16.75) |
| PCAS | social adjustment | 2 | (5) | 2.39 | (1.21) | 57 | (84) | 58.55 | (10.16) |

Table 20. Attitudes of Keith and his classmates toward selected factors related to the social setting of Room 8.

Keith's classmates comprised 11 other boys and 19 girls. Figure 14 presents a sociogram for the class showing that, apart from two clear links, there were few prime choices of boys for girls or girls for boys on three sociometric measures ("Like to sit near," "Like to work with," and "Like to play with"). There was no strong evidence of sex antagonisms in this class, nor of cliquyness but, in general, pupils' stated preferences were for their own sex groups. The sociogram reveals that there were several important central figures among both boys and girls,



10
1
29
20
27
13
25
4
17
7
6
21
5
Keith
BOYS
24
30
26
3
28
12
18
31
22
19
23
14
15
9
2
16
11
8
GIRLS
KEY
—— = sit near
······ = work with
- - - = play with
5 = Keith

Figure 14

Sociogram of Ms. Morton's
Grade Three Class based on first choices of three Measures.

and that there were also five isolates (three boys and two girls).

A more detailed examination of Keith's social relationships is presented in Table 21. The table indicates that there is very high consistency in Keith's written and verbal identification of prefereed relationships, even though these measures were taken five days apart. It should be noted that, although the written questionnaire asked for three ranked nominations, Keith consistently supplied only two. In the interview, however, although again specifically asked to give three nominations, Keith gave third and fourth choices for items 2 ("Like to work with") and 3 ("Like to play with").

From Table 21 it is seen that, in the matter of first and second choices, Keith's written and verbal responses were absolutely consistent in five of eight cases: in the three remaining cases there was still consistency in the choice of friends, but there were slight changes in the rankings. Keith's observed (Shadow Study) social interactions gave further support to approximately one-third of his stated peer preferences, but also revealed additional social relationships.

From Table 21 it is seen that Keith's stated first place preference for pupil 21 (Terry) is reinforced by the observed interactions initiated by Keith on five separate occasions. This number is equalled only in interactions with pupil 19 (Victoria), who occupied the classroom seat next to Keith.

Keith identified Terry as the classmate he played with "most of all" (Pupil Interview B). According to Keith, Terry was, "a good friend of mine. ... In fact he is the closest person (to me) in my class." When asked what makes a person a good friend, Keith replied "When he talks the same way you do." He also mentioned that he played a lot with Terry and, even though they had had arguments and Terry had "got mad at me and not talking to me," he was still "my buddy." Keith also revealed something of his honesty and acceptance of a certain understanding of his abilities in acknowledging that Terry was "pretty smart" and helped him more than he helped Terry with class work. (Terry had an I.Q. measurements of 130 -- Lorge-Thorndike, June, 1976. Ms. Morton commented that Terry had a tested I.Q. of 150 -- "He is exceptionally bright," but she also mentioned that he was an underachiever and "had to be a little bit silly" -- Teacher Interview B, Part 1.)

Keith's most frequently selected second choice in the sociometric measure was pupil 4 (Grant). Again, there was observed support for Keith's selection: he was recorded as sitting near Grant on two occasions during the Shadow Study. During the interview, Keith also mentioned pupil 3 (Tori, a girl) and pupil 29 (Ian) as classmates he would like to interact with, and again these choices were supported by Shadow Study observations. It is interesting to note that two classmates (numbers 27 and 7) gave Keith as one of their three choices on the written test but, according to all the measures used, Keith did not choose them. Furthermore, although Keith chose Terry eleven times (on all measures), Terry chose Keith only twice. Similarly, Keith chose Grant nine times, and yet was not chosen at all in return.

The extent of Keith's stated and observed preferences for contacts with classmates as presented in Table 21 shows his overwhelming preference for pupils 21 (Terry) and 4 (Grant). This information should be contrasted with the stated and observed peer preferences for Keith.

| | Information source | Classmates identified by ID number and sex | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3<br>F | 4<br>M | 7<br>M | 10<br>M | 17<br>M | 19<br>F | 20<br>M | 21<br>M | 25<br>M | 27<br>M | 29<br>M |
| 1. sit near | | | | | | | | | | | | |
| a | written test | | 2nd | | | | | | 1st | | | |
| | pupil interview | 3rd | 2nd | | | | | | 1st | | | |
| | Shadow Study | | 2 | | | 1 | 1 | | | | | |
| b | written test | | | 2nd | | | | | | | | |
| | Shadow Study | 1 | | | | | 1 | | | | 1 | |
| 2. work with | | | | | | | | | | | | |
| a | written test | | 2nd | | | | | | 1st | | | |
| | pupil interview | | 2nd | | | | | 4th | 1st | | | 3rd |
| | Shadow Study | | | | | 1 | | | 1 | | | |
| b | written test | | | | | | | | | | 2nd | |
| | Shadow Study | | | | | | | | 1 | | | |
| 3. like to play with | | | | | | | | | | | | |
| a | written test | | 2nd | | | | | | 1st | | | |
| | pupil interview | 4th | 1st | | | | | | 2nd | | | 3rd |
| b | written test | | | 2nd | | | | | 3rd | 2nd | 3rd | |
| 4. actually play with | | | | | | | | | | | | |
| a | written test | | | 2nd | | | | | 1st | | | |
| | pupil interview | 2nd | 3rd | | | | | | 1st | | | |
| | Shadow Study | | | | 1(-) | | 2 | | 2 | 2 | | 1 |
| | written test | | | | | 3rd | | | | | 2nd | |
| | Shadow Study | | | | 1 | | | | | 1 | | |

a = Keith's choice; b = chosen by classmates

Notes: Ranking indicates order given (written test) or mentioned (interview). Cardinal numbers indicate number of times behaviours observed. Aggressive "play" incident indicated by (-).

Table 21. Comparisons among the sociometric verbal tests, interview report of friends, and observed social interactions of Keith.

From Table 21 it can be seen that Keith's outpouring of affection was responded to only minimally by those he preferred.

In summary, it may be claimed that there is reasonably high consistency among the various measures used in this study to gather sociometric information on Keith. The results of these measures indicate that the intensity of Keith's preferences for friends was not matched in return. Keith, however, was not entirely lacking in appeal as a classmate, for he was chosen by several pupils, including some who were not chosen by him.

## Academic attributes, ability and achievement

In discussing her pupils on 10 May, 1976, Ms. Morton mentioned that:

> They are well above average as far as grade 3 reading ability and language arts goes. The math is lower: ... now (as opposed to the beginning of the year) it might be an average grade three (Teacher Interview B, Part 1).

Ms. Morton explained that the children had entered grade 3 with "above average achievement and ability because this is an upper economic social area." She felt, however, that "they were quite weak in math" because grades one and two teachers had devoted so much time to language arts that mathematics had been neglected. She said she considered her pupil's mathematics ability to equal their reading ability, but that mathematics achievement had been lower because "they lacked a lot of background, particularly in the facts work."

There is some support for Ms. Morton's assessment of her student's academic attributes. Table 22 presents a summary of the class' results for the CLT administered on 10 June, 1976. From

Table 22 it is seen that the class mean score for the verbal DIQ is higher than the non-verbal score, but by only 2.85 points. Also, in support of Ms. Morton's statements, from Table 23 it is seen that, according to the MAT administered in September, 1975, the achievement level of her pupils at the time of entry into grade three was indeed much lower in total mathematics (grade equivalent class mean of 2.99) than in total reading (grade equivalent class mean of 4.02). In the course of the year, however, the class showed considerable improvement in mathematics, but less improvement in reading and language. A comparison between Tables 23 and 24 shows that the class total reading performance, as measured by the MAT, improved from a grade equivalent score of 4.02 (September, 1975) to 4.92 (June, 1976); whereas the total mathematics score improved dramatically from 2.99 (September, 1975) to 4.87 (June, 1976).

In discussing her class' academic abilities on 10 May, 1976, more than six weeks before administering the second MAT, Ms. Morton assessed her class as:

> Reading now at a good grade 4 level, if not up above. Most of them are spelling now about 4.5 to 5.0 grade level (Teacher Interview B, Part 1).

An examination of Table 24 shows Ms. Morton to have been quite accurate in her assessment of the language and reading performance of her class, but she underestimated their abilities and achievement potential in mathematics. Although Ms. Morton did not appear to stress the teaching of mathematics, apparently her pupils had effectively learned the basic concepts, thus bringing "them up so that next year they won't be too far behind" (Teacher Interview B, Part 1).

| Item | Keith | | Class (N = 31) | | |
|---|---|---|---|---|---|
| | value | rank[a] | mean score | (SD) | range |
| verbal D.I.Q. | 122 | 8th (1) | 111.40 | (17.04) | 78 - 144 |
| age equivalent (months) | 120 | 10th | | | |
| grade equivalent | 4.8 | 10th | | | |
| grade percentile | 96 | 10th | | | |
| nonverbal D.I.Q. | 107 | 14th (1) | 108.55 | (16.83) | 75 - 143 |
| age equivalent (months) | 112 | 16th (1) | | | |
| grade equivalent | 4.1 | 16th (1) | | | |
| grade percentile | 75 | 16th (1) | | | |
| total D.I.Q. | 115 | 11th (1) | 110.60 | (15.93) | 77 - 143 |

a. figure in parentheses indicates number of classmates at equal rank

Table 22. Keith's results and class rank, with class means, standard deviations, and ranges on selected items of the Canadian Lorge-Thorndike Intelligence Test, (Level A, Form 1), June, 1976.

Even more striking than the overall improvement of the class mean scores are Keith's scores. A comparison of Tables 23 and 24 shows that Keith improved his total reading score from a grade equivalent of 3.6 ($\bar{x}$ = 4.02) to 5.5 ($\bar{x}$ = 4.92), and his mathematics grade equivalent from 2.5 ($\bar{x}$ = 2.99) to 4.8 ($\bar{x}$ = 4.87). Also, it is worth noting the improvement in Keith's class rank from September, 1975, to June, 1976, on all but two measures of the MAT. In September, 1975, Keith was ranked equal twelfth for total reading, and equal sixteenth for total math (Class _n_ of 26 at that time). But in June, 1976, he was ranked equal ninth for total reading and equal fifteenth for total math (class n of 31). Whereas, in September, Keith's standard scores had been generally lower than the class means, in June his scores were generally higher.

| Item | Keith | | | Class (N = 26) | | | |
|---|---|---|---|---|---|---|---|
| | std. score | rank[a] | grade equiv. | mean score | (SD) | mean gr. equiv. | (SD) |
| word knowledge | 64 | 12th (1) | 3.7 | 64.69 | (12.00) | 4.06 | (1.61) |
| word analysis | 61 | 14th (2) | 3.93 | 61.39 | (5.90) | 3.93 | (0.79) |
| reading | 60 | 13th (1) | 3.84 | 62.50 | (14.50) | 3.84 | (1.57) |
| spelling | 58 | 20th (1) | 3.78 | 64.89 | (7.76) | 3.78 | (0.91) |
| total reading | 62 | 12th (2) | 3.6 | 63.77 | (13.86) | 4.02 | (1.67) |
| math computation | 37 | 25th | 1.7 | 54.81 | (9.12) | 2.93 | (0.75) |
| math concepts | 65 | 10th (2) | 3.4 | 61.31 | (10.23) | 3.40 | (0.96) |
| math problems | 58 | 15th (1) | 2.9 | 58.15 | (13.07) | 3.08 | (1.07) |
| total math | 55 | 16th (1) | 2.5 | 60.08 | (9.56) | 2.99 | (0.76) |

[a] figures in parentheses indicate number of classmates at equal rank

Table 23. Keith's standard score, class rank, and grade equivalents with class means and standard deviations, on selected items of the Metropolitan Achievement Test (Form F), September 1975.

| Item | Keith | | | Class (N = 31) | | | |
|---|---|---|---|---|---|---|---|
| | std. score | rank[a] | grade equiv. | mean score | (SD) | mean gr. equiv. | (SD) |
| word knowledge | 74 | 9th (2) | 5.2 | 72.55 | (9.26) | 4.97 | (1.32) |
| reading | 80 | 7th (1) | 5.9 | 71.26 | (13.12) | 4.87 | (1.63) |
| total reading | 77 | 9th (2) | 5.5 | 71.94 | (11.06) | 4.92 | (1.52) |
| language | 70 | 25th (1) | 4.0 | 75.07 | (8.95) | 4.82 | (1.33) |
| spelling | 68 | 18th (1) | 4.2 | 71.55 | (9.76) | 4.69 | (1.34) |
| math computation | 72 | 17th (2) | 4.4 | 74.29 | (11.02) | 4.72 | (1.08) |
| math concepts | 75 | 17th (2) | 4.8 | 75.75 | (9.93) | 5.05 | (1.22) |
| math problems | 79 | 13th (1) | 5.1 | 77.42 | (13.16) | 5.05 | (1.56) |
| total math | 81 | 15th (1) | 4.8 | 79.90 | (10.81) | 4.87 | (1.16) |

[a] figures in parentheses indicate number of classmates at equal rank

Table 24. Keith's standard scores, class rank, and grade equivalents, with class means and standard deviations, on selected items of the Metropolitan Achievement Test (Form F), June, 1976.

The information concerning Keith presented above takes on special significance when one examines Table 25. From Table 25 it is seen that, in spite of Keith's improvement on the MAT items, and in spite of his generally average or better-than-average performance on the June MAT, Ms. Morton ranked Keith twenty-second, twenty-fourth, and twenty-fifth (n = 31) on three measures of academic success in school. It is important to notice that Ms. Morton made these projections several weeks before her pupils had written the second MAT or the CLT.

Projected rank in class (N = 31)

| item | rank |
|---|---|
| language arts | 22nd |
| mathematics | 24th |
| overall | 25th |

Table 25. Keith's rank in class according to Ms.Morton's perception of her students' achievements on selected measures, 27 May, 1976.

Ms. Morton was also asked to rank her pupils on various five-point scales according to her perceptions of how well they had met the expectations she had for them in language arts and in mathematics, according to her perceptions of their attitudes towards classroom learning activities, and according to her assessment of their academic abilities. Her perceptions are summarized in Table 26. From Table 26 it is seen that Ms. Morton perceived Keith to be one of 10 "bright" children in the class (six were ranked 'very bright'), and one of 18 "interested" pupils (four were ranked "enthusiastic"). Presumably because she considered Keith bright and enthusiastic, she had had greater expectations for him than he met. Thus, from Table 26, Keith is the lowest in a group of six pupils who fell "below" Ms. Morton's expectations for them in language arts. Similarly, he was the top of a group of six students who fell "below" her expectations for them in mathematics.

It is not clear why, in spite of improved actual class academic rankings and substantial improvement in grade equivalent academic scores, Ms. Morton had such a low opinion of Keith's academic achievement, unless, of course, her critiria for excellence were not related to those incorporated into the MAT and the CLT.

| Item | Placement of pupils on various 5-point scales (N = 31) | | | | |
|---|---|---|---|---|---|
| perceived achievement level cf expectations for LA | 7 greatly exceeded | 6 exceeded | 3 met | 6 below--6th[a] | 2 far below |
| perceived achievement level cf expectations for Math | 7 greatly exceeded | 13 exceeded | 3 met | 6 below--1st[a] | 2 far below |
| perceived attitude toward classroom teaching | 4 enthusiastic | 18 interested[a] | 5 passive | 4 uninterested | 0 resistant |
| assessment of academic ability | 6 very bright | 10 bright[a] | 8 average | 7 below average | 0 dull |

[a]indicates Keith's placement

Table 26. Ms. Morton's placement of her pupils on various 5-point scales according to her perceptions of them on selected measures, May, 1976.

Further evidence of Ms. Morton's assessment of Keith is provided by the School Progress Report and other teacher comments. Keith's report card is summarized in Table 27. Because Keith was absent from school for 27 days in December and January, there are no grades for him for the Winter report. From Table 27 it is seen that Keith's scores for the

| Item | Max. score | Winter, 1975 | | | Summer, 1975 | | |
|---|---|---|---|---|---|---|---|
| | | Keith's total scores[b] | class mean | (S.D.) | Keith's total scores | class mean | (S.D.) |
| group participation | 16.0 | | 10.64 | (1.17) | 9.0 | 12.00 | 1.83 |
| individual participation | 16.0 | | 10.57 | (1.02) | 8.0 | 11.55 | 1.74 |
| working skills | 12.0 | | 7.96 | (1.24) | 6.0 | 8.55 | 1.58 |
| LA effort | 24.0 | | 15.14 | (1.46) | 16.0 | 18.13 | 1.84 |
| LA achievement | 24.0 | | 15.11 | (1.50) | 16.0 | 18.03 | 1.80 |
| Math effort | 4.0 | | 2.61 | (0.56) | 2.0 | 3.29 | 0.77 |
| Math achievement | 4.0 | | 2.57 | (0.49) | 2.0 | 3.07 | 0.72 |
| Science effort | 4.0 | | 2.96 | (0.19) | 3.0 | 3.19 | 0.60 |
| Science achievement | 4.0 | | 2.96 | (0.19) | 3.0 | 3.13 | 0.56 |
| S.S. effort | 4.0 | | 2.82 | (0.39) | 2.0 | 2.87 | 0.57 |
| S.S. achievement | 4.0 | | 2.75 | (0.44) | 2.0 | 2.90 | 0.47 |
| Art effort | 4.0 | | | | 3.0 | | |
| Art achievement | 4.0 | | | | 3.0 | | |
| Music[a] effort | 4.0 | | | | 3.0 | | |
| Music achievement | 4.0 | | | | 3.0 | | |
| P.E. effort | 4.0 | | | | 4.0 | | |
| P.E. achievement | 4.0 | | | | 4.0 | | |
| Printing/Handwriting effort | 4.0 | | 2.74 | (0.59) | 3.0 | 3.26 | (0.44) |
| Printing/Handwriting achievement | 4.0 | | 2.74 | (0.59) | 3.0 | 3.16 | (0.37) |

[a] taught by subject specialist

[b] no report for Keith due to lengthy absence

Note: class means were not available for all items

Table 27: Keith's scores for "effort" and "achievement", with class means and standard deviations, obtained from his School Progress Report.

Summer report are consistently lower than the class means. In some cases, his scores are greater than one standard deviation lower than the means. These scores represent Ms. Morton's rating of Keith's "effort" and "achievement" in the various subject areas.

On April 13, 1976, Ms. Morton made notes on all of her pupils in preparation for parent interviews (in lieu of reporting via the School Progress Report). Her comments on Keith are given below:

> I'm very pleased with the progress Keith has shown in both his work and his work habits since our last interview. Keith is showing more self-discipline and his listening skills are improving considerably. (General comment)
>
> It's nice to see the excellent improvement in work habits. Keith is completing assignments neatly and accurately. (Work skills)
>
> Keith has shown excellent progress in his comprehension and word attack skills. (Reading)
>
> Keith seems to feel better about his written work. I'm very pleased with his progress. (Language skills)
>
> Keith has shown remarkable progress in his spelling skills. This is reflected in tests and written assignments. (Spelling)
>
> Keith prefers to write in one space, he does a nice neat job. (Handwriting)
>
> Keith shows good progress in his basic facts. (He) shows a good grasp of addition, subtraction, and multiplication facts covered thus far. He is somewhat confused about > < or = to. (Math)
>
> Keith is a more active participant. He listens and considers others' ideas. (Social Studies)
>
> Keith shows a keen interest in this area. (Science)
>
> The class has enjoyed Keith's artistic efforts. He seems to really enjoy drawing. (Art)
>
> Keith is a good participant, he is quick and agile. (Physical Education)

It seems reasonable to describe these as generally positive and encouraging comments which reflect Keith's evident ability and improved levels of achievement. It seems, however, that Keith's improvement was short-lived, or Ms. Morton changed her mind, for the Summer report was less positive. Ms. Morton's lowered opinion of Keith's work is reflected in his report card discussed above, and also in Ms. Morton'a anecdotal comments reproduced below. These comments are all taken from the School Progress Report and dated June, 1976:

> Keith is an active participant in group discussion. At times he finds it difficult to concentrate on written work assignments. (General comments)
>
> Keith has shown good progress in language arts this year. He seems more comfortable with written assignments. He seems to lack confidence at times and has days where he finds it difficult to complete assignments. (Language Arts)
>
> Keith shows a good grasp of his basic facts. He finds new concepts easy to grasp. At times, this (sic) lack of confidence results in unfinished assignments. (Math)
>
> Keith put a good effort into science fair project. (Science)
>
> Keith expresses himself well in group discussions. (Social Studies)
>
> Keith seems to enjoy drawing. We have enjoyed his artistic efforts. (Art)
>
> Keith seems to take keen interest in all physical activities. (Physical Education)
>
> Keith has shown good progress in handwriting.
>
> Good efforts, Keith. (Music -- subject specialist)

Ms. Morton's report card comments, although not entirely negative, do not contain the references to "excellence", "remarkable progress", and increased "self-disciplined" made in the April comments. Instead, Ms. Morton mentions problems in concentrating on written assignments, a lack of confidence, and unfinished assignments.

Ms. Morton's assessment of Keith's academic ability notwitstanding, from Table 28 it is seen that Keith had a low perception of the difficulty (MCI) of classwork. Furthermore, although his academic self-image (PCAS) was not very positive, it was only slightly below the class mean score. But most strikingly, Keith's score on the SEI general self-esteem factor was considerably more than one standard deviation above the class mean score, seemingly indicating that Keith was not unduly perturbed over his academic performance in school.

| Instrument | Factor | | | | | Complete instrument | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Title | Keith's score | (max) | Class mean | (SD) | Keith's score | (max) | class mean | (SD) |
| MCI | difficulty | 11 | (27) | 12.87 | (3.13) | 85 | (135) | 98.87 | (7.31) |
| SEI | general self | 42 | (152) | 31.16 | (8.97) | 72 | (100) | 61.29 | (16.75) |
| PCAS | academic self-image | 11 | (18) | 11.58 | (3.85) | 57 | (84) | 58.55 | (10.16) |

Table 28. Attitudes of Keith and his classmates toward selected factors of self-esteem and perceived difficulty of schoolwork.

In summary, it appears that according to Ms. Morton's criteria Keith was an academic underachiever. Standardized tests indicated that he had good academic attributes and abilities, but his work for Ms. Morton did not attain the same standards. It also appears, however, that Ms. Morton's low opinion of Keith's academic abilities was maintained in spite of some evidence of his good attributes, especially in language. It is possible that Ms. Morton's perception of Keith's academic abilities were influenced by other attitudes she had toward him, or by other behaviours displayed by Keith. The next section will examine the classroom coping behaviours of Ms. Morton's pupils.

## Classroom coping behaviour

According to data collected during CASES observations (summarized in Table 29), the predominant style of behaviour of Keith and his classmates was "conforming, passive, and submissive to directions" (Style H) in TD settings, and "appropriately task-oriented, independent, and self-motivated" (Style G) in NTD settings. About one quarter of the class also displayed evident "attentive, adult-oriented, and compliant" (Style E) behaviours in TD settings, and a few students were visibly "assertive, socially integrative and task-oriented" (Style F) in NTD settings. On the other hand, almost one half the class, including Keith, displayed visibly inappropriate behaviours ("resistant, passive aggressive, delaying, and peer-oriented" -- Style B; "passive, withdrawn, avoidant, and dreamy" -- Style C; and "peer-dependent, distractible, and off-task" -- Style D) in TD settings. Similarly, about one third of the class, also including Keith, visibly displayed these same inappropriate behaviours in NTD settings.

The CASES data are supported by the anecdotal reports of the observers. One observer noted that:

> Pupils continue to show a mixture of behaviours, sometimes very mature (and) responsible ; (and at) other times foolish, annoying, (and) lacking in concentration (Anecdotal Notes B, 1).

And from another observer:

| CASES coping styles | TD settings |  |  |  |  |  | NTD settings |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | LA |  | Math |  | Combined[a] |  | LA |  | Math |  | Combined[a] |  |
|  | score | vis % | score | vis % | score | vis% | score | vis % | score | vis % | score | vis% |
| A (aggressive, manipulative) | 0 | 0.0 | 2 | 0.86 | 2 | 0.36 | 0 | 0.0 | 1 | 1.00 | 1 | 0.18 |
| class $\overline{X}$ |  | 0.06 |  | 0.86 |  | 0.07 |  | 0.49 |  | 0.16 |  | 0.12 |
| S.D. |  | 0.17 |  | 0.25 |  | 0.13 |  | 0.10 |  | 0.37 |  | 0.17 |
| B (resistant, peer-oriented) | 9 | 0.62 | 13 | 0.89 | 28 | 0.80 | 31 | 1.10 | 6 | 0.96 | 37 | 1.08 |
| class $\overline{X}$ |  | 0.54 |  | 0.48 |  | 0.59 |  | 0.54 |  | 0.48 |  | 0.60 |
| S.D. |  | 0.30 |  | 0.68 |  | 0.27 |  | 0.31 |  | 0.40 |  | 0.27 |
| C (passive, dreamy) | 1 | 0.34 | 0 | 0.0 | 7 | 1.00 | 7 | 1.25 | 1 | 0.80 | 8 | 1.17 |
| class $\overline{X}$ |  | 0.57 |  | 0.20 |  | 0.48 |  | 0.47 |  | 0.27 |  | 0.48 |
| S.D. |  | 0.55 |  | 0.36 |  | 0.39 |  | 0.40 |  | 0.47 |  | 0.40 |
| D (distractible, peer-dependent) | 6 | 0.52 | 2 | 0.17 | 9 | 0.32 | 13 | 0.58 | 2 | 0.40 | 15 | 0.55 |
| class $\overline{X}$ |  | 0.63 |  | 0.31 |  | 0.53 |  | 0.67 |  | 0.49 |  | 0.66 |
| S.D. |  | 0.31 |  | 0.28 |  | 0.24 |  | 0.37 |  | 0.61 |  | 0.37 |
| E (attentive, adult-oriented) | 8 | 0.69 | 1 | 0.09 | 12 | 0.43 | 3 | 0.13 | 1 | 0.20 | 4 | 0.15 |
| class $\overline{X}$ |  | 0.74 |  | 0.23 |  | 0.63 |  | 0.18 |  | 0.33 |  | 0.21 |
| S.D. |  | 0.52 |  | 0.48 |  | 0.30 |  | 0.17 |  | 0.44 |  | 0.18 |
| F (assertive, task-oriented) | 0 | 0.8 | 0 | 0.0 | 0 | 0.0 | 4 | 0.18 | 3 | 0.60 | 7 | 0.26 |
| class $\overline{X}$ |  | 0.02 |  | 0.01 |  | 0.01 |  | 0.40 |  | 0.39 |  | 0.35 |
| S.D. |  | 0.30 |  | 0.16 |  | 0.02 |  | 0.41 |  | 0.80 |  | 0.31 |
| G (independent, on-task) | 1 | 0.05 | 6 | 0.30 | 7 | 0.14 | 45 | 1.14 | 10 | 1.14 | 55 | 1.15 |
| class $\overline{X}$ |  | 0.09 |  | 0.11 |  | 0.08 |  | 1.57 |  | 1.38 |  | 1.54 |
| S.D. |  | 0.15 |  | 0.15 |  | 0.08 |  | 0.34 |  | 0.75 |  | 0.32 |
| H (conforming, passive) | 33 | 1.89 | 34 | 1.95 | 75 | 1.78 | 9 | 0.24 | 1 | 0.13 | 10 | 0.24 |
| class $\overline{X}$ |  | 1.75 |  | 2.07 |  | 1.87 |  | 0.14 |  | 0.13 |  | 0.13 |
| S.D. |  | 0.37 |  | 0.72 |  | 0.25 |  | 0.14 |  | 0.20 |  | 0.10 |
| Overall CASES coefficient |  | 4.64 |  | 4.76 |  | 4.51 |  | 5.29 |  | 5.96 |  | 5.41 |
| class $\overline{X}$ |  | 4.64 |  | 4.71 |  | 4.64 |  | 6.35 |  | 5.90 |  | 6.26 |
| S.D. |  | 0.50 |  | 1.05 |  | 0.35 |  | 0.82 |  | 2.21 |  | 0.69 |

[a] combined total includes tallies from other subject areas

Note: underlining indicates behaviour is visible (> 1.00)

Table 29. Behavioural styles of Keith and his classmates according to setting and subject matter (CASES B).

> Teresa R. was not in the TD group. She did very little on her own -- wandered around caressing the chest and tummy of another girl who came to borrow an eraser. Marni was doing very little -- started teasing Kelly,(which) spread to involve Kathy and Sharon (Anecdotal Notes B; 2).

The overall behavioural climate of Keith's classroom was one of freedom (sometimes more akin to licence), and busy-ness (not necessarily purposeful or on-task). This is not to deny the accuracy of the CASES data, but it is to say that although practically all students evinced the desirable behaviours Styles G and H for much of the time, a considerable proportion of the class members also exhibited categorically inappropriate styles of behaviour for a significant amount of time.

Keith's was a very complex character. On one occasion his teacher said of him that he was one of a number of pupils who:

> Seem to be able to go ahead quite independently and get started, organize themselves quite well ... (they) seemed to be on task and be able to start without too much direction (Teacher Sort Task Interview B, 3).

Yet, on another occasion, Ms. Morton identified him as one who:

> Has had trouble finishing things, getting things done ... If he's really out of sorts he could easily spend the whole day not doing much of anything and using the set-up that I have to bother others ... He has had trouble getting along at certain times. He quite often gives up or does sort of a passable effort and then stops (Teacher Interview B, Part 2).

This apparent contradiction characterizes almost all of the information that was obtained on Keith, no matter the source of the information, its focus, or the means by which the information was gathered.

The most obvious contradiction in Keith was in his classroom behaviours. According to the CASES data (Table 30), when considered over all settings and in all subjects, Keith's behaviour was "desirable" for 61.37% of the time, "inappropriate" for 37.91% and "unacceptable"

| Behaviour classification | TD settings | | | | | | NTD settings | | | | | | Both settings | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LA | | Math | | Combined[d] | | LA | | Math | | Combined[d] | | LA | | Math | | Combined[d] | |
| | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % |
| desirable[a] | 42 | 72.41 | 41 | 70.69 | 94 | 67.14 | 61 | 54.46 | 15 | 60.00 | 76 | 55.47 | 103 | 60.59 | 56 | 67.47 | 170 | 61.37 |
| inappropriate[b] | 16 | 27.59 | 17 | 29.31 | 45 | 32.14 | 50 | 44.63 | 10 | 40.00 | 60 | 43.79 | 66 | 38.80 | 27 | 32.53 | 105 | 37.91 |
| unacceptable[c] | | | | | 1 | 0.77 | 1 | 0.89 | | | 1 | 0.73 | 1 | 0.59 | | | 2 | 0.72 |
| total | 58 | | 58 | | 140 | | 112 | | 25 | | 137 | | 170 | | 83 | | 277 | |

[a] visible at 80%

[b] visible at 10 - 15%

[c] visible at 3%

[d] includes tallies from other subjects

Table 30. Classification of Keith's behaviour according to subject and setting (CASES B).

for 0.72%. According to Spaulding (1975), types of behaviour classified according to standards set by the classroom teacher will be obvious to most observers when they reach particular threshold percentages (80% for desirable, 15-20% for inappropriate, and 3% for unacceptable behaviours). The proportions assigned to Keith's behaviours by the CASES data were supported by separate assessments based on the Shadow Study observations (see Table 31) and the various teacher interviews. It is clear that Keith spent a considerable amount of his time behaving in inappropriate ways, and this was, for him, a dominant form of behaviour.

A more detailed examination of Keith's behaviour gives some insight into the contradiction referred to earlier. From Table 29 it can be seen that, in common with practically all his classmates, Keith behaved in obviously desirable ways in both TD and NTD settings, no matter whether the subject content was in language arts or mathematics. In TD settings he was "conforming, passive, and submissive to directions" (Style H), and in NTD settings he was "appropriately task oriented, independent, and self-motivated" (Style G). But it may also be seen from Table 29 that, in TD settings, Keith was obviously "passive, withdrawn, avoidant, and dreamy" (Style C), and also quite high in "resistant, delaying, peer-oriented, off-task" (Style B) behaviours. In NTD settings, Keith's Style B behaviours became obviously visible, and his Style C behaviours also remained visible. Ms. Morton's already quoted comments are thus substantiated, but for further insight into Keith's behaviours it is helpful to turn to the reports emanating from the Shadow Study and the subsequent Pupil Interview.

The day of the Shadow Study began in regular fashion. It was a pleasant, warm morning with the room temperature already 21°C at 8:30 a.m. Shortly after 8:30 a.m. the school day began with the singing of "Oh Canada", and soon Ms. Morton had gathered the class on the rug (see Figure 11, p. ) to discuss some assigned homework. Most children attended to their teacher, but Keith was holding and twisting a one dollar bill with his hands, while looking at it and smiling to himself. Keith's behaviour continued in this manner for about 10 minutes, during which time he appeared not to be attending to Ms. Morton's comments or the class discussion which was taking place. He glanced up and around occasionally, but the only other apparent focus of interest was his friend Terry, who was sitting close beside Keith. Meanwhile, the lesson had developed to include pupil readings of their own compositions, with accompanying teacher comments. The classroom social atmosphere was pleasant, comfortable, and supportive, but increasingly throughout this latter portion of the lesson, pupils engaged in minor deviant behaviours, although only one pupil was chastised to the point of being sent to sit at his desk.

As the lesson continued, Keith and Terry begain to interact through talking and some touching, but this brought no response from Ms. Morton, and this was the situation until shortly after 9:00 a.m. when the children were sent back to their seats. When questioned about this part of the day (Pupil Interview B) and presented with the statement that it looked as though he wasn't paying very much attention to the lesson topic, Keith readily admitted:

> Yes, I wasn't. I don't know why I sit next to Terry. There's one reason, I really like him, really a lot I guess. But sometimes I pay attention when I'm not sitting close to him.

Several other examples may be given of Keith's off-task and/or avoidant behaviours in situations where he was taking part in TD settings (usually on the rug), or in NTD settings (usually at his desk). Shortly after morning recess, for example, while sitting at his desk, Keith was drawing a bird on a sheet of paper. The teacher-assigned task was to extract information from a copy of the city business directory which lay on his desk. Ms. Morton called, "Keith!", at which he looked at her and replied, "Yeah?" But Ms. Morton's attention was immediately diverted to another pupil, whereupon Keith gazed around the room in general. Five minutes later, the observer noted:

> Keith is doing little work. (He has written) only two words on the worksheet. (His) writing is immature and untidy (Shadow Study Notes B).

And again, immediately after lunch, Ms. Morton was giving instructions concerning preparations for the visit later that afternoon of four regular parent aides. The pupils were sitting at their desks and should have been paying close attention to their teacher. Keith, who was drawing on his desk-top, was only partly attending to her but realized that some of the instructions applied to him. Raising his hand, he called out, "I'm in Mrs. Pedersen's group," to which Ms. Morton replied, "O.K., what should you be doing?' Keith took some papers from his desk and placed them on the rug, while Ms. Morton continued with her instructions. During the return to his desk, Keith looked at and spoke to Kelly, then looked at Teresa before sitting down. Once seated, he spoke to Cathy, then Victoria, later taking Victoria's glove and otherwise interacting with her, when he should have been giving his attention to his teacher.

And, finally, shortly before 3:00 p.m., Keith was one of 17 pupils and four parents in the classroom. The parents were giving individual assistance to pupils, while the remainder of the class worked on individual tasks either in the room or in the library. Ms. Morton patrolled the room and the library answering questions and checking pupils' work. The room temperature had now climbed to 28°C and, although making no particular fuss or noise, few children seemed to be working very hard except when they took their turn with a parent. Keith sat in his seat scribbling on his desk-top, looking sometimes at the scribble and sometimes at the teacher. He continued his pencil-shading, then dragged a finger through the lead to make tracks across the desk. While this was happening, Charlotte hiccoughed, whereupon Keith called out, "Put a paper bag over your mouth."

Keith continued the scribbling activity for most of the following 10 minutes. He left his desk twice in that time, once to speak to Charlotte (although during the Pupil Interview he could not remember this incident), and once to show his mathematics worksheet to Ms. Morton and ask for her help. Ms. Morton said, "You know how to do it," at which Keith grinned sheepishly, returned to his seat and recommenced drawing on his desk-top. Five minutes later he was approached by Terry, and Keith asked, "Help me, please?" Terry asked for Ms. Morton's permission, which she refused to give. Terry then left the room and Keith, with nine minutes left in the school day, started on the worksheet. At this point, concerning Keith, the observer noted:

> He lacks perseverance, concentration, attention span, and motivation ... (He) is soon gazing about again and is off-task (Shadow Study Notes B).

It is fair to say that the incidents described above characterized much of Keith's behaviour on the day of the Shadow Study. And, extrapolating from the CASES data to a "typical" schoolday in Keith's life, it also seems fair to say that the inappropriate behaviours closely observed that day would be seen on many, if not most, other days in Keith's grade three school life (see Table 31). No doubt a case could be made for claiming extenuating circumstances in the case of the Shadow Study day, for the classroom was extremely hot and stuffy, and the presence of the parents (although a regular, weekly, prepared for and expected occurrence) presumably exerted some influence on the classroom events. But another, unexpected event during the Shadow Study day throws a different light on the matter.

First, it should be made clear that Keith's classroom behaviour in the regular classroom setting for at least part of the Shadow Study day was proper and desirable. From 9:15 a.m. through 9:46 a.m. the class had been set the task of completing language arts worksheets. The pupils, although sometimes out of their seats to visit classmates or leave the room, had settled down to work with accompanying positive reinforcement comments from Ms. Morton. Sitting at his desk at 9:15 a.m., Keith raised his hand for Ms. Morton's attention, asked a question to which she replied, "O.K.," and continued writing on his worksheet. He glanced up only briefly to check when the teacher called to another pupil, but immediately returned to his writing. The observer noted that Keith:

> Now seems interested and occupied with the worksheet (Shadow Study Notes B).

| Behaviour classification | Threshold visibility % | CASES data % | Shadow Study % |
|---|---|---|---|
| desirable | 80 | 61.37 | 59.65 |
| inappropriate | 10 - 15 | 37.91 | 35.05 |
| unacceptable | 3 | 0.72 | 5.25 |

Table 31. Classification of Keith's behaviour according to actual CASES data, and a CASES analysis of the Shadow Study specimen record data.

Five minutes later, Ms. Morton, walking behind Keith, put her hand on his head saying, "Much better, Keith". Keith continued to work. A few minutes later he again raised his hand for and received assistance from his teacher. His neighbour, Jeff, appeared to have completed his worksheet, and initiated a conversation with Keith. Keith seemed to look at Jeff's worksheet, but then raised his hand again for Ms. Morton's assistance. Keith asked her how to spell a word, but she told him to fetch the dictionary and she would help him find the word, which she did by probing Keith's expectations of how the word should be spelled. Shortly after 9:30, Ms. Morton called Keith's group to the rug to give an explanation of dioramas. Although generally giving his attention to the teacher, while on the rug Keith interacted with Grant, first by listening to him, then by snuggling against him. But by 9:40, the pupils had returned to their desks and Keith, with some requested assistance from the teacher, was again legitimately busy, this time tracing pictures of prehistoric animals from a workbook. In spite of attempts by Jeff to distract him and engage him in conversation, Keith remained on-taks. The observer noted:

> Keith seems to be concentrating on his drawing. (He) is now industrious; moves (the) pencil with assurance, sits tightly at the desk, body neat (Shadow Study Notes B).

But a much clearer and more convincing demonstration of Keith's potential for concentrated, on-task, sustained work and study was provided immediately following the lunch recess. It had been previously arranged for an external proctor (one of the six investigators in this study) to administer the CLT. After some administrative arrangements and an introduction from Ms. Morton, the proctor took charge and had the students reorganize the configuration of their desks. He then spent several minutes in explanation of the test procedures. The room temperature at this time was 25.5°C and, although the students fidgeted, they were quiet and cooperative.

During this time, and for the 70 minutes that it took to administer the test, the great majority of Keith's behaviour was very obviously on-task. There were three recorded moments of inappropriate behaviour, which included scribbling on his desk-top, leaning over to touch and speak to Victoria, and playing with a piece of string. And there was one incident of resistant behaviour (classified by the CASES instrument as "unacceptable") when the proctor ordered pencils to be placed on the desk-tops but, apparently because he had three questions on the page to complete, Keith did not comply with the order, and only very reluctantly turned the page at the proctor's next command.

Concerning this portion of the Shadow Study day, the observer noted:

> (The) class is totally still, quiet -- the first time in all our visits (to the room) over the past six weeks (Shadow Study Notes B).

This unusual interlude in the school day seemed to indicate first, that Ms. Morton's class was capable of quiet, un-moving, generally on-task, concentrated behaviour in an intellectually demanding situation. And second, that in such a setting, Keith was a generally competent, cooperative, and on-task student.

That Keith was aware of his problems in coping in Ms. Morton's class was made evident in the Pupil Interview. Reference has already been made to Keith's acknowledgement of his friend Terry being a distracting factor. Keith was also aware that some of his own behaviour was improper and unhelpful. He was very conversant with the "rules" of the room and knew his teacher's expectations for students, but when he was asked in the Pupil Interview if he could do better at school than he was presently doing, he readily admitted he could. The interview continued:

> Interviewer: What would help you do better things at school? What could Ms. Morton do to help you do better?
>
> Keith: That's kind of a hard question.
>
> Interviewer: You say that you do better things or work harder if you have to have something done. So could Ms. Morton do anything that would help you to do harder work, to get work done?
>
> Keith: Well, she could put down on the board and then (if) she said that we will have to get this done and tomorrow we'll have a new one. If you don't get that done it will go on your report that you didn't. This kind of sometimes frightens us.
>
> Interviewer: That would make you work hard you think?
>
> Keith: Yes.
> (Pupil Interview B)

Later on in the Pupil Interview, Keith was asked how he felt about the TD sessions with Ms. Morton on the rug:

> Keith: Time for another discussion or something.
>
> Interviewer: Is that a good thing?
>
> Keith: Yes, it's kind of fun.

Learning, of course, can be "fun". But it seems likely that Keith enjoyed taking advantage of the social situation on the rug as well as any discussion or learning activity which also took place. The interviewer also asked:

> Interviewer: What about when you were sitting in your desk and you were supposed to be working -- were you concentrating as hard as you could?
>
> Keith: Not really. The class was -- sometimes you noticed it was kind of noisy. I couldn't really work. When it's quiet I can really work good.
>
> Interviewer: Would you like it, do you think, if your teacher was to have a quieter class?
>
> Keith: Yes. Then everybody would get their work finished.

It is ironic that Ms. Morton perceived Keith's classroom coping problems much as he had described them and as they were recoreded by the observer. During one teacher interview, more than two weeks prior to the Shadow Study, Ms. Morton said about Keith that:

> He has had trouble finishing things, getting things done. At various points in time he's sort of improved and come a long way. Then sometimes he seems to fall back into his old habits. If he's feeling really out of sorts he could easily spend the whole day not doing much of anything and using the set-up that I have to maybe bother others. I see him as the kid who finds it difficult to work within that framework in that he will be distracting others (Teacher Interview B, Part 2).

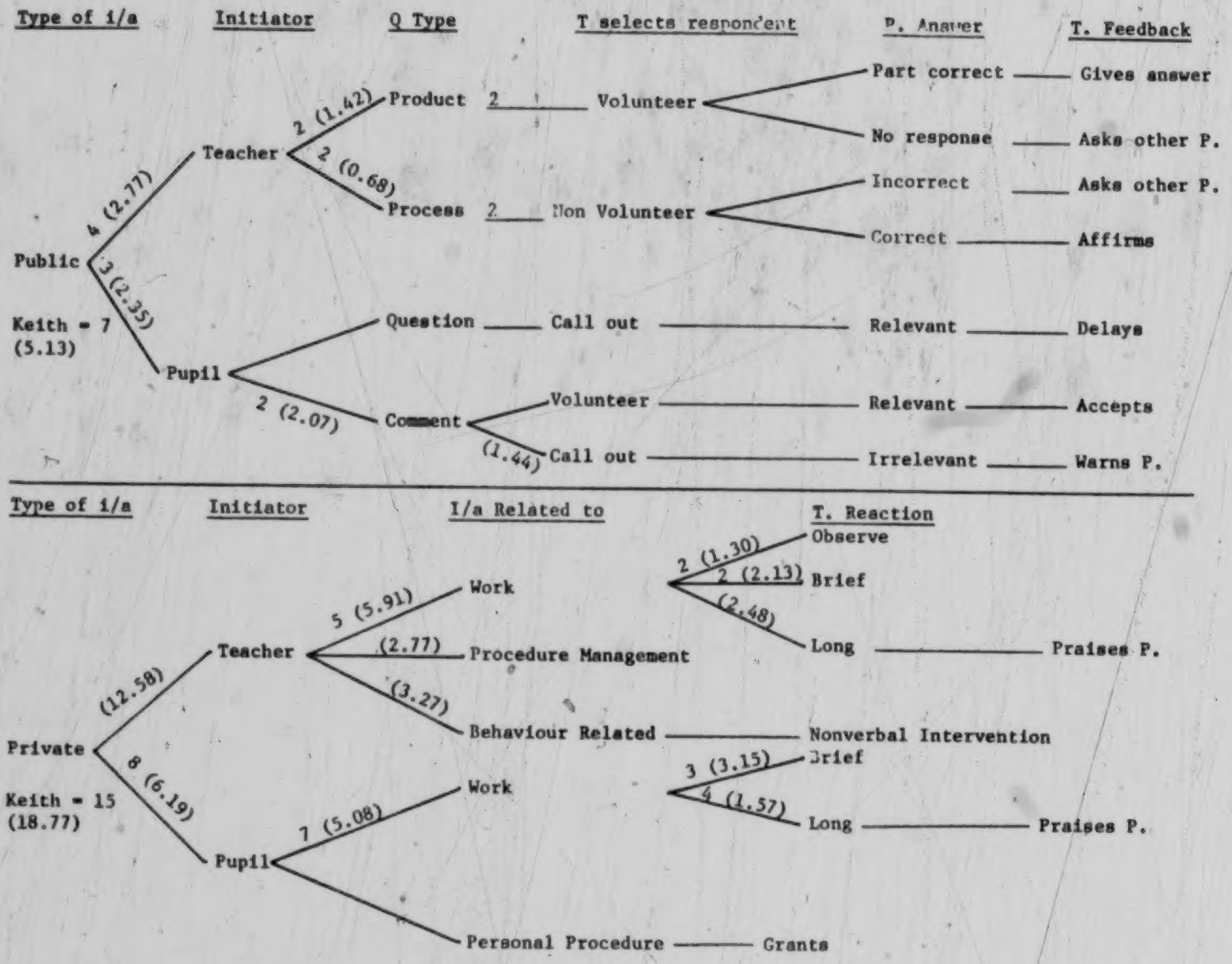
And during another teacher interview, three weeks before the Shadow Study, Ms. Morton recalled that:

> Keith was one child that I really tuned onto as not doing anything before I put the assignment up. I also remembered that he needs something right in front of him to say, "This is what you do," not just, "Go ahead and finish it (Teacher Stimulated Recall Interview B, 2).

From the DICOS data (see Appendices C and J) it is seen that almost one third of Ms. Morton's dyadic interactions with pupils were public. Also, more than half of her total interactions were initiated by students. These details lend support to the concept of Ms. Morton's teaching as being quite open and child-centered. From Figures 15 and 16 it is seen that the number and nature of Keith's dyadic interactions with Ms. Morton were typical for his class, although she initiated fewer interactions with Keith than she did with other students, and Keith initiated more interactions with her than did his classmates.

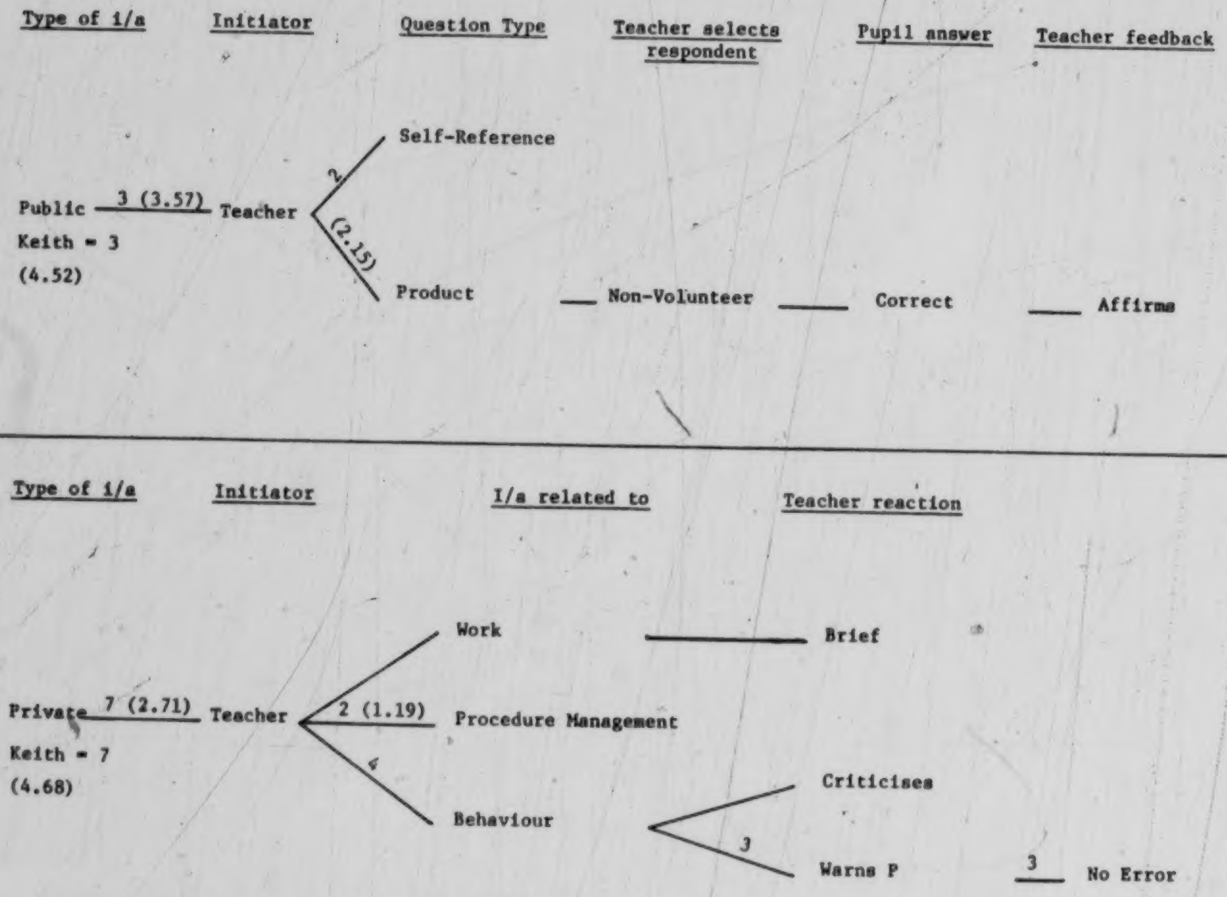
In eight language arts lessons, most of the private interactions were work or behaviour related, and several resulted in priase for Keith. In four mathematics lessons, however, Ms. Morton initiated all interactions, and several of these were private and resulted in criticism or warnings for Keith.

In view of the details presented above concerning Keith's behaviour and academic achievements, and Ms. Morton's perceptions of him, it is not surprising that Keith was chosen by Ms. Morton as one of three children she would be "relieved to have removed" from her class (Teacher Interview B, Part ). According to Silberman's (1969) classification, Keith was "rejected" by Ms. Morton. As predicted by Silberman, being a "rejection" student resulted in his receiving more


Type of i/a
Initiator
Q Type
T selects respondent
P. Answer
T. Feedback
Public
Keith = 7
(5.13)
4 (2.77)
3 (2.35)
Teacher
Pupil
2 (1.42)
2 (0.68)
Product
Process
2
2
Volunteer
Non Volunteer
Part correct
No response
Incorrect
Correct
Gives answer
Asks other P.
Asks other P.
Affirms
Question
Call out
Relevant
Delays
2 (2.07)
Comment
Volunteer
Relevant
Accepts
(1.44)
Call out
Irrelevant
Warns P.
Type of i/a
Initiator
I/a Related to
T. Reaction
Private
Keith = 15
(18.77)
(12.58)
8 (6.19)
Teacher
5 (5.91)
Work
(2.77)
Procedure Management
(3.27)
Behaviour Related
2 (1.30)
Observe
2 (2.13)
Brief
(2.48)
Long
Praises P.
Nonverbal Intervention
Pupil
7 (5.08)
Work
3 (3.15)
Brief
4 (1.57)
Long
Praises P.
Personal Procedure
Grants

Note: links with no figure showing represent N = 1. Class means < 1.00 not shown

Figure 15. Nature of the public (Class N = 159) and private (class N = 582) interactions between Keith and Ms. Morton in eight language arts lessons (DICOS B).


Type of i/a
Initiator
Question Type
Teacher selects respondent
Pupil answer
Teacher feedback
Public
3 (3.57)
Teacher
Keith = 3
(4.52)
2
Self-Reference
(2.15)
Product
Non-Volunteer
Correct
Affirms
Type of i/a
Initiator
I/a related to
Teacher reaction
Private
7 (2.71)
Teacher
Keith = 7
(4.68)
Work
Brief
2 (1.19)
Procedure Management
4
Behaviour
Criticises
3
Warns P
3
No Error

Note: Links with no figure showing represent N = 1. Class mean < 1.00 not shown.

Figure 16. Nature of the public (class N = 140) and private (class N = 145) interactions between Keith and Ms. Morton in four mathematics lessons (DICOS B).

"criticism" and "warning" contacts than his classmates.

Thus, in summary, Keith may be described as a pupil who had coping problems in the classroom situation. These problems arose at least in past as a consequence of Ms. Morton's classroom rules and procedures, and resulted in Keith exhibiting many inappropriate behaviours. These behaviours and the possible reasons for them were recognized and acknowledged by both Keith and Ms. Morton. The next section will present a summary discussion of Keith's school experiences.

## Discussion

The discussion presented here will focus on salient points contained in the previous sections and which seem to have special significance for Keith's life as a school pupil. Where appropriate, cause and effect relationships among the factors brought into the discussion will be suggested. Finally, evaluative comments will be made concerning the formal education of Keith.

Keith had extremely positive attitudes toward school, and positive attitudes toward his teacher, Ms. Morton, and the teaching-learning situation. His attitude toward his class was somewhat less positive. The distinction between "school" and "class" in Keith's stated preferences was perhaps related to the fact that "school" encompasses many of the extra-class activities and events which might be termed "fun" (such as playing with friends at recess times, and attending school assemblies); whereas "class" must necessarily include certain daily learning activities and enforced associations with classmates which are more likely to be irksome to pupils.

Keith readily acknowledged the importance of school, both as a means of obtaining a job later in life, and also as a matter of enabling one better to cope with life and its problems. In spite of the admitted importance of school, Keith did not appear to be very concerned to do well at school, nor was he anxious in the classroom situation. These are rather surprising findings since Keith was the eldest of three siblings, and complained that his parents often expected too much of him. But, perhaps in part as a defence against parental pressure, and in part because he suffered from a hearing deficiency, Keith was often categorized as passive, withdrawn, dreamy, and avoidant in the classroom situation (Table 29). Ms. Morton complained that Keith did not work hard, nor consistently, nor well -- he did not "get things done."

One reason for Keith's lack of on-task behaviour in the classroom was that he was often resistant to Ms. Morton's instructions, and frequently interacted inappropriately with his classmates, particularly with Terry, his best friend. As a result of Keith's lack of success in "finishing things, getting things done," his actions in distracting his classmates, and his difficulty in working within Ms. Morton's chosen classroom routines, Ms. Morton selected Keith as one of three students she would like to have removed from her class (Teacher Interview B, Part 2). In short, Ms. Morton had quite negative attitudes toward Keith.

It appears that Ms. Morton's negative attitudes toward Keith may have influenced her judgement of his academic abilities and caused her to rank him very low among his classmates on measures of achievement in language arts and mathematics (Table 25). This low ranking is reflected in Ms. Morton's comments on Keith's School Progress Report (see p.211), although she criticized his work habits rather than his academic accomplishments.

It is undeniable that Keith, with measured IQs of 122 (verbal) -- ranked eight in class -- and 107 (nonverbal) -- ranked fourteenth in class -- had unexpectedly high academic attributes (Table 22). These attributes were, furthermore, substantiated by his results on the MAT (ranked ninth on reading and fifteenth on mathematics) administered at the end of his grade three year (Table 24). Nevertheless, Ms. Morton's negative attitudes and perceptions prevailed, and she ranked him twenty-second in class on language arts, and twenty-fourth on mathematics (Table 25).

Also undeniably, Keith was not a "good" student. Apart from his own lack of on-task behaviour, he frequently joined Terry in behaving inappropriately -- behaviour which may have been particularly annoying for Ms. Morton since she was very impressed with Terry's measured high I.Q. (which she quoted as being 150 and which in fact was measured at 130 -- CLT, 1976), and deplored the fact of Terry not attaining his academic potential. Ironically, both Keith and Ms. Morton were aware that Keith was easily distracted, spending much time off-task, and that such behaviour was at least in part a result of classroom routines maintained by Ms. Morton. Unfortunately, Keith could not himself remedy the situation, and Ms. Morton either did not seem prepared to cater to Keith's personal learning requirements or she was not capable of so doing.

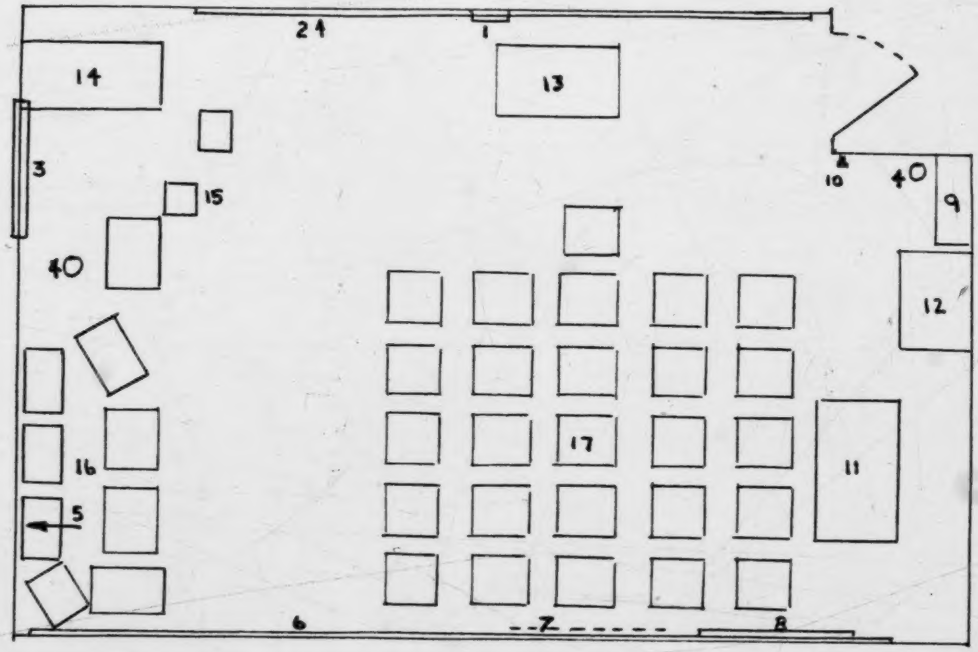
That Keith was capable of consistent, sustained, on-task, academically-oriented behaviours was made evident during the Shadow Study day when he wrote the MAT. In that situation, with disciplined quietness and order in the room, Keith did well. One can only speculate on how much better would his academic learning and performance throughout the year have been had Ms. Morton gone beyond recognizing his needs to catering to them effectively and in time.

## The grade six classroom: Room 16

Jamieson School had been conceived and designed for a smaller population of students that it was eventually required to accommodate. In order to meet the space requirements of the unanticipated extra pupils, eight portable classrooms arranged in two pods (of four rooms to each pod) had been attached to one side of the main school building so as to form an integral part of the school (see Figure 5, p. 93). Ms. Peters and her grade six class occupied a portable room in one of the pods.

As is typical of many portable classrooms, Room 16 gave the impression of being simply an oversized, oblong box. To the occasional visitor, it lacked a sense of purpose and permanence -- it lacked the atmosphere of being lived in and enjoyed, the feeling of "belonging-to-someone" that many regular elementary school classrooms have. Ms. Peters and her pupils had added their own group personality to the room in the form of some work displays and a very fine mural, but the basic bland design and colour of the room seemed to have defeated these efforts to add warmth and character to the room.

Classroom 16 (Figure 17) was quite a small room: 18' wide and


2
4
1
14
13
3
15
10
4
40
9
40
12
17
11
16
5
6
7
8

KEY

1. Clock
2. Tackboard
3. Window
4. Garbage Can
5. Mural
6. Chalkboard
7. A-V Screen
8. Map
9. Movable Bookcase
10. Pencil Sharpener
11. Teacher's Desk
12. Table
13. Puppet Theatre
14. Furnace Motor
15. Spare Chairs
16. Tables
17. Pupil Desks

Figure 17

Environmental Details of Room 16, Jamieson School

27' long. The indented entrance to the room from the hallway resulted in the loss of even more space. One window, five feet wide, was located in the narrow wall opposite the classroom entrance. Although the window provided quite good lighting, rows of fluorescent lights were needed throughout the day to provide sufficient light for all classroom needs. Two off-white and two gold-coloured walls blended quite well with the fully carpeted, orange coloured floor.

A green chalkboard ran the length of one of the long walls, and a tackboard ran the length of the other long wall. Pupil displays (short paragraphs and poems written on construction paper cut into the shapes of kites and flowers) were affixed to the tackboard, together with three-dimensional representations of cloud formations (cotton batten on blue construction paper) and a neglected local weather chart. Along the wall above the top of the chalkboard were self-portraits and one-page autobiographies prepared by the pupils. An atmospheric weather map was taped to the board. Eighteen illustrated poems, written on construction paper, hung above Ms. Peters' desk. A very artistic mural depicting aspects of life of Ancient Rome decorated half of the bulletin board on the window wall. The mural was the work of Ms. Peters' pupils, and had been prepared by tracing the outline of a picture produced through use of an overhead projected. Twenty pupil-prepared "books" also on Ancient Rome, beautifully made and illustrated, completed the decoration of the bulletin board. Finally, 10 spheroid, paper mobiles hung from the ceiling, and one poster depicting birds and one alphabet chart were tacked to the shortest wall.

The pupils' and teacher's desks and chairs occupied approximately half the floor space. Other space was taken up by several tables, used mainly for storage of paper, reading materials, and pupil assignments, and for some display materials. The reading materials included several short story books, and copies of Readers Digest magazine. The display materials consisted of some pupil-created meteorology equipment (thermometer, barometer, and weather-vane). The only proper storage facility, apart from the pupils' desks, was a small, movable bookcase. Finally, there was a pupil-made puppet stage, fabricated from cardboard and construction paper, and featuring several commercially produced Sesame Street puppets. There was no evidence of learning stations or activity centres, nor was there any attempt to create areas of differential activity: the pupils typically worked at their desks and did not use the various tables as work spaces.

Ms. Peters' room was provided with a large map of the world and a projection screen, but all other audio-visual materials were obtained on short-term loan from the school's library or audio-visual storage room. There was little other equipment in the room: a small supply of construction and drawing paper, some cloths and jars (for art-work projects), one commercially produced game, eight dictionaries, about twenty library books (in the bookcase), and one SRA reading kit (apparently unused). There were no class sets of books kept in the room.

During the time of this investigation, the observers found the room to be usually quite warm (from 20°C in the mornings rising to 27°C by later afternoon), and stuffy (the air-conditioning plant was inefficient and the window could not be opened). Noise did not seem to be a distracting factor in the room, however, even though the air-conditioning unit located in one corner of the room produced a continual low throbbing sound. Little could be heard of external noise, and the carpetting helped deaden internal noises and reduce footsteps to a dull, hollow sound.

## The grade six teacher: Ms. Peters

### Introduction

Ms. Peters was described by one classroom observer as "a tall, middle-aged... woman (who) has a commanding presence in the classroom" (Anecdotal Notes C, 2). Doubtless Ms. Peters' commanding presence was at least partly a result of her 18 years of teaching experience at various levels of schooling, and the variety of teaching experiences she had gained in three different countries.

Ms. Sheila Peters was born and received her initial teacher education course (lasting two years) in a Commonwealth country. Having taught for one year in her native country, she then moved to teach for one year in a large city of a second Commonwealth country. She had spent the past 16 years living and teaching in Western Canada, and for nine of those years she had lived and taught in Westham.

Her initial training had prepared Ms. Peters to teach upper elementary grades, but in completing her degree through part-time studies at a university in Alberta, she had specialized in Business Education, and had used this qualification in teaching grades 10 and 12 for some years. For the past few years she had taught grade six classes and, at the time of this investigation, by her own preference she taught only in the mornings, and was responsible for the language arts and social studies components of the time-table for her class.

Both classroom observers were generally favourably impressed by Ms. Peters' classroom manner and the attitudes she displayed towards her students. One observer commented:

> She (Ms. Peters) continues to strike me as very efficient (in the classroom). ... she was very efficient, very business-like, but not cold (during an interview between the observer and Ms. Peters). (Anecdotal Notes C, 1).

The same observer was particularly interested in Ms. Peters' affective attitudes and on one occasion noted:

> She showed higher levels of warmth--good-natured kidding, calling them (the pupils) 'dear', touching them --- also a couple of examples of high empathy (where) she reflected their meaning and feelings beautifully --- a couple of times even went further and verbalized pupils' unstated feelings (Anecdotal Notes C, 1).

Ms. Peters generally treated her pupils with respect and consideration, and as individuals -- and she obviously expected nothing less from them. A second observer recorded that:

> She (Ms. Peters) gets good cooperation from the pupils, who are quite relaxed with her. She is polite and firm with them -- doesn't show anger, but reminds them of rules, asks for their cooperation, and doesn't put up with much nonsense. (Anecdotal Notes C, 2).

Pupil attitudes toward Ms. Peters, the class and schoolwork are summarized in Table 32. From the MCI satisfaction with the class factor and the PCAS attitude to class factor, it seems that Ms. Peters' pupils were quite well satisfied with being in her class. For example, according to individual items in these factors,23 of 26 pupils agreed that "Most pupils are pleased with the class" (MCI), and 22 of 25 pupils agreed with the statement "I like being in my class" -- three others answered "Not sure" -- (MCI). Twenty-one of 25 students agreed with "I'd rather be in any class than the other classes for my age" and three were "Not sure," similarly, 21 agreed with "I'm happy to be in the class I'm in now" and four answered "Not sure" (PCAS).

Ms. Peters' pupils were less positive concerning their interaction with instruction in the classroom. According to individual items in the WSAT factor (Table 32), only seven pupils agreed with "What we learn in class makes me want to learn more" -- "Most of the time." Thirteen answered "Some of the time", and six answered "Not very often." Somewhat more positively, eight pupils agreed that "Most of the time" "My teachers make class interesting"; while 16 thought this statement to be true "Some of the time", and two thought "Not very often."

It should be made clear that Ms. Peters taught her homeroom class for language arts and social studies only, therefore many of the responses to the WSAT items noted above should not be regarded as applying only to Ms. Peters. The PCAS relationship with teacher factor probably provides for a more accurate measure of pupil attitudes toward Ms. Peters (see Table 32). According to individual items in this factor, 17 pupils agreed that "Teacher gets on well with me" -- "Most of the time;" and the remaining eight agreed "Sometimes." Although only 12 students agreed with "Teacher is interested in me," 21 responded "Most of the time" to "My teacher is nice to me." Sixteen pupils answered "Yes" to the stronger statement" "I think my teacher likes me" (PCAS).

Ms. Peters' score on the MTAI, at the 73rd percentile, confirmed the positive opinion that the observers held for her in her interpersonal relationships with pupils. The pupils' perceptions of their relations with Ms. Peters were mixed, but according to the relevant factors and individual items on both the PCAS and the MCI, about two-thirds of her pupils had favourable attitudes towards and opinions of Ms. Peters and their relations with her. One example of a negative response to one of Ms. Peters' "rules" occurred during morning rool-call. An observer noted that:

> (for roll-call, Ms. Peters) expects the students to reply 'Here, Ms. Peters!' One boy said 'Here', and she called his name three times before he realized that he had forgotten to repeat her name (Anecdotal Notes C, 2).

| Instrument | Title | Factor | | Complete instrument | |
|---|---|---|---|---|---|
| | | Stuart's score (max) | Class mean (SD) | Stuart's score (max) | Class mean (SD) |
| MCI | satisfaction with the class | 27 (27) | 21.93 (3.63) | 109 (135) | 96.32 (7.09) |
| WSAT | student-instruction interaction | 67 (78) | 58.52 (7.14) | 114 (138) | 102.12(10.91) |
| PCAS | interest in schoolwork | 4 (16) | 3.00 (1.08) | 64 (84) | 52.17 (9.85) |
| | relationship with teacher | 6 (6) | 4.08 (1.52) | | |

Table 32. Attitudes held by Ms. Peters' pupils, including Stuart, toward selected class, instruction, and teacher factors.

Another, more hostile, encounter occurred two weeks later. On that occasion the observer recorded that:

> The teacher had some trouble with Darren today. She asked him something and he didn't reply using her name, which she insists upon. She kept after him several times, and he resisted, finally calling her by her surname only, and she tacked the 'Ms.' on herself (Anecdotal Notes C, 2).

Some insight into Ms. Peters' personality may be provided by her responses to the 16 PF questionnaire (see Appendix I). According to this instrument she was extremely tender-minded and self-sufficient; and very reserved, shy, humble, and shrewd. As contradictory as some of these descriptors seem to be, they do agree quite closely with the observers' perceptions of Ms. Peters, and their reports of her observed behaviour and actions. These descriptors also help in understanding some apparent contradictions in Ms. Peters' personality, especially with regard to her differential treatment of her students -- a matter to be discussed later.

During an interview, and in response to a question asking what she considered to be her most important tasks as a teacher, Ms. Peters replied:

> My most important task is to get the very most out of every child. I like them to consider me as a friend, but a respected friend... they can come and talk to, but still knowing that I won't allow them to get away with poor work and still knowing that they have to do their very best for me. (Teacher Interview C, Part 1).

The sentiments and beliefs encapsulated above receive support from Ms. Peters' responses to the 16 PF questionnaire already mentioned, and from her responses to the TIBT.

According to the TIBT, Ms. Peters' had a basic belief orientation in System 1, with traces of System 2 (see Appendix G). Harvey

(1974) characterizes System 1 people as having "a strong need for structure; rigid adherence to rules, authorities, and values which provide structure; and rejection of environmental inputs which are dissonant with the individual's organized modes of interpretations." The System 1 person gives the impression of having "definite stands on every topic ... and rejects things if they do not meet his (her) high standards or ideals of perfection" (Harvey, 1974). Ms. Peters had a secondary belief set in System 2. System 2 is similar to System 1 in many ways, although the System 2 person tends to be characterized by much more hostile, negative beliefs. Harvey's (1974) description which best characterizes Ms. Peters is his comment that "this subject makes positive statements about the underdog, the loner, minority groups and individuality."

A closer examination of Ms. Peters' specific responses to the TIBT items perhaps helps in understanding her actions and behaviours as a teacher. In stating her belief concerning the Canadian way of life she said, in part, that "children have a chance to reach full potential." From comments made during interviews in the course of this investigation, it was obvious that Ms. Peters believed that helping children reach their full potential by getting "the very most out of every child" (see p.240) was an important task for her as a teacher. This belief, however, did not seem to be applied equally to all the pupils in her class.

Reference has previously been made to Ms. Peters' expectations for the manner in which pupils addressed her. This matter is further elaborated on in her stated belief about back-talk from students:

> I do not like any kind of back-talk. I treat all people, students included, with a great deal of respect and courtesy, and I expect the same from them. I don't even like to hear back-talk amongst students themselves, I expect students not to say anything (at all) rather than anything (impolite). (TIBT Response Booklet C)

Ms. Peters did, in fact, receive very little insolent behaviour from her students, even though they had the reputation amongst other teachers of being the worst behaved class in the school.

Another quality possessed by Ms. Peters may have a bearing on her differential treatment of members of her class. In stating her belief concerning lying, Ms. Peters said:

> I don't like lying. I am completely unable to lie... I have given up even trying. I tend to be brutally frank, and sometimes I wish I could gloss over the truth a little to prevent hurt feelings (TIBT Response Booklet C).

Perhaps it was her desire to be truthful and the resulting frankness which made it difficult for Ms. Peters to deal effectively and empathically with the small group of dull students in her class, while the more intelligent students were afforded much of her attention and frequently produced work of excellent quality.

Ms. Peters considered that she had a "very bright class", but noted that:

> I have a big range of ability, but I only have five children who have been assessed as having problems with reading and that sort of thing. (Teacher Interview C, Part 1)

She mnetioned that she did not want this smaller group of children to feel separated. In particular, she tried to have the children feel proud of their accomplishments. But she was also concerned about the bright students:

> I really do worry about the bright students -- we are not offering them really enough. We work so hard with the average and the below average -- our poor top students bother me because I feel we are losing a lot and I know that some of those students -- by the time they get to grade 6 -- could actually be doing high school work (Teacher Interview C, Part 1).

The manner in which Ms. Peters planned for and dealt with the issues referred to above, and her classroom procedures in general will be discussed in the next sections of this chapter. Also, selected goal statements will be more closely examined in relation to their operationalization in order to understand more fully the nature of the classroom setting.

## Goals

In answer to a question asking what she considered to be her most important tasks as a teacher, Ms. Peters replied:

> My most important task is to get the very most out of every child. I like them to consider me as a friend, but a respected friend... and I want him to be able to feel that he has achieved something ... to feel pride in his work (Teacher Interview C, Part 1).

In the continuing discussion and in response to other questions, Ms. Peters explained her goals in more detail. Her goals have been gleaned from the teacher interviews and have been collated and summarized as follows:

Academic goals

- each pupil to achieve to the utmost personal level
- to write well -- fluently and concisely, creatively
- to develop good work habits.

Emotional goals

- to have a sense of pride in accomplishment
- (the remedial students) to have feelings of satisfaction and achievement

- to have a sense of uniqueness and value in what they have to offer others.

Social goals

- to have pupils consider the teacher a respected friend
- to improve inter-personal behaviours amongst pupils
- to work independently.
- to have a sense of responsibility for personal acts

There was no doubt in Ms. Peters' mind concerning the importance of language arts and mathematics, but she particularly stressed language -- understandably, since this was one of her two areas of responsiblity. Although she repeatedly mentioned her desire "to get the most out of every child," she elaborated on this goal in detail only as it applied to language arts topics and, as she stated, she used "social studies as a way to reach language, mostly" (Teacher Interview C, Part 1).

Ms. Peters also differentiated her goals for the two groups of students she identified in her class. In addition to achieving well academically, she wanted her large group of bright students to "improve the way they talk to each other" -- to be more polite (this is a reflection of her comments conerning back-talk in response to the TIBT). In spite of their superior intellect, she considered this group to be quite immature socially.

For the small group of five remedial pupils, she had lower academic goals (partly becuase she considered that reading, for example, was more the responsibility of the remedial teacher to whom these pupils went for special instruction). But she tried "to give them other things that count, rather than the skill building things." She particularly wanted this group to feel pride in their work, and not to feel separate from the larger group.

Ms. Peters was ambivalent concerning her success in attaining her goals. With regard to the level of achievement attained by the small remedial group, she was:

> Really happy ... because they are all working to their utmost ability, and even more. They are doing well (Teacher Interview C, Part 1).

But her assessment of the brighter students was less decided. At one point in the interview, when asked how she felt about the way they were achieving academically, she replied:

> I really am very pleased ... (after a slump in their efforts) they seem to be really working well ... I think that they are really going ahead again ... making good strides. (Teacher Interview C, Part 1)

Later in the interview, however, when asked to what extent she was satisfied that the bright students were achieving the goals that she considered to be important, she commented:

> I'm not really that satisfied in a way because I have several really bright students ... and I still have the feeling they are doing enough just to satisfy me, and I know they can do more. (Teacher Interview C, Part 1)

The curriculum content which was provided by Ms. Peters and her colleagues for this grade six class is presented and briefly discussed in the following section.

### Curriculum content and organization

Ms. Peters, who taught only in the periods before lunch, was responsible for teaching language arts and social studies. Her work in language arts was supplemented by a remedial reading specialist in the case of the five remedial students. All other subjects were taught only in the periods after lunch, and were usually taught by other subject specialist teachers in the school. The curriculum content and timetable which were typical for Ms. Peters' class are outlined below:

Subjects

- language arts (Gates' language experience program for the brighter students; Open Highways reading series for the five remedial students), also includes spelling
- social studies (often integrated with language arts)
- mathematics
- art
- music
- French
- science

Timetable example

| a.m. | (Ms. Peters) | p.m. | (specialist teachers) |
|---|---|---|---|
| 8:40 | spelling | 12:30 | art |
| 8:40 | social studies | 1:15 | music |
| 9:50 | RECESS | 1:45 | RECESS |
| 10:05 | social studies | 2:00 | science/math |
| 10:28 | language arts | 2:45 | French |
| 11:15 | LUNCH | 3:15 | SCHOOL OUT |

It should be pointed out that no attempt was made to investigate the goals, curriculum plans, or teaching methods of subject specialist teachers. Little will be presented here concerning lessons taken after lunch. For the pre-lunch periods, Ms. Peters made it clear that she did not adhere to a strict timetable, but varied the time allocated to a topic according to the objectives she had, and the achievements and interests of the pupils:

> Sometimes I will have social studies two periods, and then the language (arts) the next two. I can afford to do that. I have the class for nothing else than language arts and social studies, and I just carry on from exactly where I left off the day before ... .
>
> After next week I will be doing nothing else but social studies for about two weeks in a row because that is reading and language arts and the whole works all together. I really don't follow a strict timetable at all. I usually have spelling first thing every morning -- I've always done that. I'll be dropping that, too, when we get really involved in social studies. (Teacher Interview C, Part 1)

The program material used by Ms. Peters was largely a result of her own preferences and library research, and her 18 years of teaching experience. She noted that there was no school policy concerning curriculum content and, although the provincial department of education provided a curriculum guide, she largely ignored it, except as a check against omitting important topics. She believed in tailoring her program to meet the needs of her particular students, and was selective in choosing curriculum materials, using her personal stock of "thousands of books ... collected over the years" to supplement school materials. Furthermore, she claimed not to "believe in textbooks, except for readers," which she felt were justified as assigned texts.

Some comment should be made concerning the post-lunch program because of various problems which arose during that period and which were not so evident in the morning session. It was earlier noted that Ms. Peters' class had the reputation amongst other teachers of presenting the most control problems of any class in the school. The grounds for this assessment were possibly aggravated because these 10-year-old children needed the security of a "home-base", and a home-room teacher, yet these were denied them during the afternoons. Furthermore, for various reasons, the link-up between the pupils and the specialist teachers was often mis-timed, leaving the students to their own non-directed and inappropriate devices. Finally, it is possible that at least some of the specialist teachers had a somewhat off-hand attitude toward teaching Ms. Peters' class, and did not present lessons which were well focused and adequately planned. Evidence that this attitude existed became apparent during the Shadow Study day when, concerning her lesson, the art specialist volunteered to the observer that she allowed the students to work without much interference -- "as long as they got things done, she doesn't try to control them very much" (Shadow Study Summary C).

The disjointed nature of their typical school-day was not lost on these grade six pupils. At the end of the Shadow Study day, one girl approached the observer and said, "Congratulations! You're the first person who's spent a full day with this class." The difference between the morning and afternoon behaviour of this class was most marked. Ms. Peters' instructional methods and classroom policies will be presented in the following section.

## Instructional methods and policies

It seems that the methods and policies which Ms. Peters had adopted for her class were based on her personal standards and goals for the class, and her assessment of the class. Ms. Peters' standards and goals have been presented and discussed earlier in this chapter, but brief comment will be made concerning her assessment of the class.

When asked to describe the learning activities and teaching methods she employed, Ms. Peters commented that discussion was not a successful strategy with her class. She had found that whole-class discussion was unsatisfactory because a few pupils dominated the discussion while others were entirely neglected. Furthermore, small discussion groups were unsuccessful because her pupils argued and could not discipline themselves to an orderly presentation of view-points. She considered that the reason for her class' inability to hold an effective discussion was:

> Poor discipline. When I first got them, I had the feeling they had never been made to settle down and really produce something worthwhile. In fact, they told me that. (Teacher Interview C, Part 1)

After this initial response, Ms. Peters commented concerning the general work habits of the class:

> They had very poor work habits ... social habits as well.... They were just handling in any old thing, and it was going to be enough as far as they were concerned. I spent the first half of the year ripping things out and returning it, and getting them to do it again.

To counteract the unsatisfactory work habits and to promote her own objectives, Ms. Peters made extensive use of project work and report writing, frequently followed by pupil oral reports to the class. Following an oral report, other pupils were encouraged to question the presenter and offer criticism on both the material presented and the manner of the presentation.

The preparation of the reports was usually done during individual seatwork, although cooperation was allowed, as were purposeful movement and conversation during seatwork. It appeared that Ms. Peters had "expectations" rather than specific rules; for example, there was little hand-raising by pupils when they wished to make a public statement, unless the raising of hands became necessary to maintain order. Ms. Peters' instructional methods and classroom policies have been extracted from various teacher interviews and observers' reports and are summarized as follows:

Methods

- independent seatwork and written projects
- oral reports, with reciprocal questioning by students
- teacher uses generally privately uttered encouragement and exhortation

- pupils make notes during teacher presentations
- partners used, each to check the work of the other
- self-checking of test items
- use of reference materials in the classroom and the library

N.B. Although Ms. Peters distrusted discussion as a strategy, it was in fact used quite frequently in the whole-class situations.

Policies

- some use made of auxilliary learning spaces
- conversation and movement allowed if purposeful
- pupils must be silent and attend to teacher when she speaks
- teacher checks pupils' workbooks frequently (especially those of the remedial pupils)
- teacher will not accept poor quality work
- teacher retains weak, immature pupils in grade six for an extra year
- some students are assigned to assist with the grade one reading program
- pupils are to address each other politely, and the teacher as "Ms. Peters"
- to cope with deviant behaviours:
    - pupils may be detained for 10 minutes at lunchtime (rarely happens)
    - teacher asks to see pupil's workbook to point to need for extra effort
    - teacher may call out deviant pupil's name
    - teacher may threaten to send pupil to join the kindergarten class

N.B. Ms. Peters stated that she did not believe in punishment, nor did she find it necessary to punish her pupils. Other pupils sometimes remonstrated successfully with deviant pupils.

According to the classroom observers, Ms. Peters was successful in maintaining the class as a cohesive unit, she did, however, quite often work with the bright students and the remedial students as separate groups. This was most frequently done by calling the five remedial pupils to stand at her desk. At other times, but infrequently, she gave different assignments to the two groups.

On one occasion, while speaking with the remedial group at her desk, she was interrupted by the loud conversation of the larger group and remonstrated, "Grade six, you know I have very little time with this group and I think it's very discourteous of you to behave this way." (Anecdotal Notes C, 2) This approach typified Ms. Peters' manner of addressing her class, and generally met with the desired results. The same observer reported that on the occasion of some unacceptable behaviour by a boy, Ms. Peters said nothing, but simply stared at the boy, "controlling with her eyes." That this polite, yet firm and calm manner had effective results was attested by Ms. Peters' pupils, one of whom informed a classroom observer that "We're well behaved with Ms. Peters" but that some of the afternoon teachers were much less demanding.

The atmosphere in Ms. Peters' classroom was not oppressive. From Table 33 it is seen that, during the morning of the Shadow Study when Ms. Peters was the teacher, although most pupils were most frequently located in their own desks, they were not restricted to their desks, There is evidence of movement about the room, as well as outside the room to visit the library. An observer reported:

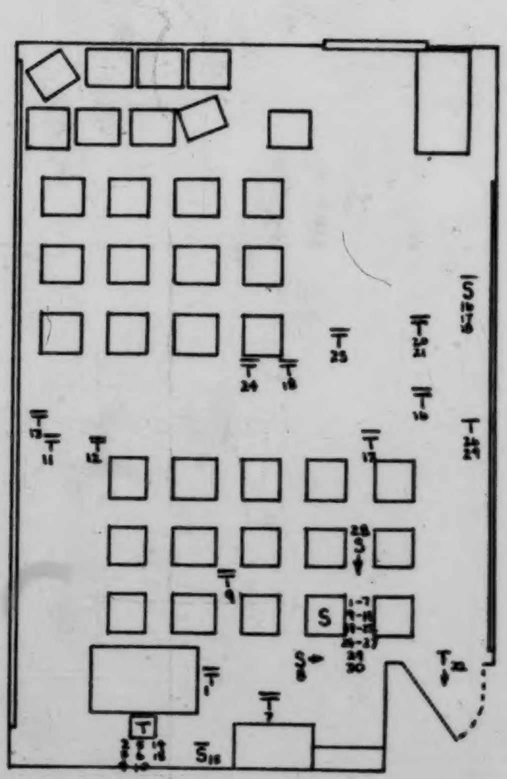
> During much of the day's activities the pupils were involved in seatwork. During this time it seemed evident that there is a nice, pleasant relationship between (Ms. Peters) and her students. (Anecdotal Notes C, 1)

There is evidence that Ms. Peters much preferred this type of situation. From Figure 18 it is seen that, during the day of the Shadow Study, for eight of 15 behaviour setting samples taken while Ms. Peters was in the classroom, she was to be found seated at her desk. This seemed to be the location she typically preferred, and from her desk she was able to maintain the easy control that she appread to feel most comfortable with.

| Time samples in order | Locations of pupils (N = 25) |  |  |  |  | Locations of teacher | Notes |
|---|---|---|---|---|---|---|---|
|  | in own desks | moving to/ from desks | out of room | standing to work | standing about/ sitting on floor |  |  |
| 1 | 23[a] | 1 |  | 1 |  | standing near desk | Two students work side-by-side |
| 2 | 23[a] | 1 |  | 1 |  | seated at desk |  |
| 3 | 21[a] | 1 |  | 3 |  | seated at desk |  |
| 4 | 22[a] |  |  | 1 | 2 (at T's desk) | seated at desk |  |
| 5 | 20[a] |  | 2 |  | 3 (2 at T's desk) | seated at desk | Some pupils visit the library |
| 6 | 15[a] |  | 5 |  | 5 (4 at T's desk) | seated at desk |  |
| 7 | 21[a] | 4 |  |  |  | standing near desk |  |
| 8 | 4[a] | 1 | RECESS -- most pupils outside |  |  | not in room | RECESS: some pupils opt to work in room |
| 9 | 21[a] | 2 |  | 2 |  | standing among pupils |  |
| 10 | 21[a] |  | 1 |  | 3 | seated at desk |  |
| 11 | 20 | 1 | 2 | 1[a] | 1 | walking across F & C |  |
| 12 | 23[a] |  | 2 |  |  | standing F & C |  |
| 13 | 23[a] | 1 |  | 1 |  | standing F & C |  |
| 14 | 19[a] |  | 1 | 5 |  | seated at desk | Remedial group (5) at teacher's desk |
| 15 | 17 | 1[a] |  | 7 |  | seated at desk | Remedial group (5) at teacher's desk |
| 16 |  | 1 |  | 10[a] | 14 | standing R & C | Art lesson: pupils working on mural, but not enough space to all work simultaneously |
| 17 |  |  |  | 15[a] | 10 | standing R & C |  |
| 18 |  |  |  | 10[a] | 15 | standing C of room |  |
| 19 | 25[a] |  |  |  |  | not in room | Change of subject |
| 20 | 25[a] |  |  |  |  | standing F & C | Proctor administers test to 13 pupils, others allowed to stay in desks or draw on board. |
| 21 | 21[a] | 1 |  |  | 3 (sitting on desks) | standing F & C |  |
| 22 | 24[a] | 1 |  |  |  | standing by door |  |
| 23 | RECESS — all pupils outside |  |  |  |  |  |  |
| 24 | 21[a] |  |  | 4 |  | standing C of room | Pupils (4) at listening centre (episodes 24-27). |
| 25 | 20[a] |  |  | 5 |  | standing C of room |  |
| 26 | 16[a] |  | 5 | 4 |  | standing R and C | Pupils leave room to get drinks and fresh air. Change of subject. |
| 27 | 6[a] |  | 15 | 4 |  | not in room |  |
| 28 | 22 | 1[a] |  |  | 3 (2 on desks) | not in room |  |
| 29 | 25[a] |  |  |  |  | standing R & C |  |
| 30 | 25[a] |  |  |  |  | standing R & C |  |

[a] location of Stuart

Table 33. Locations of pupils and Ms. Peters in Room 16 as sampled every tenth minute throughout one day (Shadow Study Notes C).


T
S
T 25
T 24
T 18
T 16
T 13
T 11
T 12
T 17
T 9
T 1
T 7
T 22
S 8
S 16
S 28
1-7

KEY

T = Ms. Peters
S = Stuart
$\overline{S}$ = Standing
←S = Walking
$\boxed{S}$ = In Desk
Subscripts = Location in order of sampling.

NOTE: T Locations 1 - 15 are for Ms. Peters; Locations 16 - 29 are for afternoon lessons.
For episodes 8, 19, 23, 27, and 28, there was no teacher in the room (see Table 33).

Figure 18

Map of Ms. Peters' and Stuart's classroom locations plotted every tenth minute throughout one day. (Shadow Study Notes C)

It was also noted that, on the occasion of practicing a play in classtime:

> The confusion seemed to bother her -- it was evident she didn't enjoy the activity too much. Seems as if she felt that these activities should take place every so often so she was keeping a 'stiff upper lip' and going through the motions. It is certainly not the atmosphere in which she feels most comfortable. (Anecdotal Notes C, 1)

Another situation which Ms. Peters seemed to find uncomfortable was in having the class arranged in several small groups, and this may account for her not looking favourably upon this classroom strategy. On one occasion, several students had been sent to assist with the grade one class. The remaining grade six students were divided into three groups, two in the clas-room and one in the library. The observer noted:

> (Ms. Peters) seems to get very flustered in this type of activity. (She) had difficulty handling everything happening at once to her satisfaction. She seems very uncomfortable in this situation. (Anecdotal Notes C, 1)

Further insight into Ms. Peters' qualities as a teacher is provided by the ratings assigned to her on the HIRS (see Appendix F). According to this instrument, Ms. Peters was very highly rated for her classroom management skills, showing herself to be particularly adept at maintaining momentum or appropriate pacing in the lesson. This assessment reinforces the observations on Ms. Peters previously presented here and suggests that she preferred working with the whole class rather than small-groups because the former situation afforded her greater control without overly taxing her management skills.

Ms. Peters was also highly rated on her instructional skills. In particular, she was rated as highly persuasive, showing herself to be acknowledged by her pupils as a strong and powerful person in the in the classroom setting, and capable of maintaining pupil on-task behaviours.

In her interpersonal skills, Ms. Peters showed a curious contradiction that helps to place some of her behaviours in sharper focus. Although she was rated as a very warm person, caring for and respectful of her students, Ms. Peters was rated quite low on empathy. It was, perhaps, her inability "to wear another's shoes" that resulted in Ms. Peters' seemingly unfeeling treatment of her remedial students, in spite of her expressed concern for them. Ms. Peters' apparent preference for working with the class as a whole group, and her dislike of or inability to work with several small groups may be important factors in the issue of her differential treatment of her bright and remedial students. Because of the saliency of this topic in Ms. Peters' goal statements and classroom behaviours, the item will be discussed more fully in the following section.

## Discussion

In her goal statements, Ms. Peters mentioned that her most important task was "to get the best out of every child" (see p.243), and, in terms of academic achievement, "my job is to get the most out of each child in that room -- I don't care what level he is at" (Teacher Interview C, Part 1). But in discussing her program she commented that she had two distinct groups of pupils: a group of successful students among whom were several very bright children, and a group of five students who had been assessed as having learning problems, and who were in need of special remedial assistance. The purpose of the discussion presented here is to explicate what is apparently Ms. Peters' main goal, that is "to get the most out of each child" in terms of her classroom practices and behaviours.

Ms. Peters' grade six class would have presented a serious challenge for any teacher. Apart from matters of pupil personality and classroom behaviours, there was the problem of dealing with a group of seven girls and 19 boys whose academic attributes ranged from D.I.Q.s of 72.5 to 138 as measured on the Canadian Lorge-Thorndike Intelligence Test, written in June, 1976. In other terms, Ms. Peters had to accommodate children whose grade equivalent ranged from grade four through almost to grade 10 (MAT, Form 9, June 1976). Five of these children, all boys, were achieving at the grades four and five levels in language; the remaining students were all achieving at the grades seven through nine levels.

According to discussions held with Ms. Peters, she was very conscious of her five remedial pupils and wanted to promote their learning. Concerning her remedial group, she said:

> I'm trying to give them as much work as possible along with the others. I don't want them to feel separated. Their social studies are the same -- I just don't expect quite as much. And if you watch, if you are in the room continually, you notice that I give pretty well all my help to these students -- these five. (Teacher Interview C, Part 1 -- emphasis added).

Ms. Peters elaborated that, although she spent little time trying to improve reading skills (this was the responsibility of the remedial teacher):

> I'm trying to give them that extra little bit that will make them feel good -- feel as though they are achieving things ... If I can develop a feeling of pride for the work that they have done, I will feel I've done a good thing. After that, anything they do they will want to do well. I don't accept any sloppy work -- it's got to be their best

> work. A lot of them have never been used to that. (Teacher Interview C, Part 1)

But in contrast to some of these statements, Ms. Peters admitted that she spent "much more time than I should with the top students" (Teacher Interview C, Part 1). In fact, according to both classroom observers, Ms. Peters spent comparatively little time with the remedial pupils. Also, there was some felt discrepancy in her manner of dealing with them. One classroom observer noted:

> During ... class, she (Ms. Peters) spent about 15 minutes working with her group of five (remedial students). This is the first time I have seen her give a concentrated block of time to them, even though in an interview she said she devotes ... 'most' of her time to them. ... She is good to them, but somehow doesn't seem to have the same interest, enthusiasm, or patience that is exhibited with the group of 20 (bright students). Anecdotal Notes C, Part 1).

On another occasion, the observer commented:

> Although she praises them (the remedial students), she shows a fair amount of disinterest in them. Praise seems almost artificial. When they mispronounce words, she corrects them in a mechanical way -- almost as if she didn't expect anything better from them. (Anecdotal Notes C, Part 1)

And on a third occasion the same observer noted:

> Again, I get the impression that she is ignoring the group of five. She sets them to work and then seems to forget them as her attention is centred on the rest of the class. Her philosophy regarding gifted children seems to come out with regard to the group of five. (Anecdotal Notes C, 1).

The philosophy to which the observer referred was actually represented by two sets of statements made by Ms. Peters. In the first set of statements she expressed her concern for the bright students:

> I really do worry about the bright students. We are not offering them nearly enough....Our poor top students bother me because I feel we are losing a lot . ... I don't know what the answer is, but I do feel badly for the really bright students. (Teacher Interview C, Part 1)

Perhaps it was this deeply felt concern that unconsciously caused Ms. Peters to spend more of her time and energy than she realized in working with her bright students. Furthermore, her comments concerning three of her remedial pupils expanded into a more generalized statement concerning the role of the school:

> These three boys have no business being in an ordinary classroom -- no business at all. They should be either in some sort of special class where they are given woodwork with saws and hammers -- maybe lots of field trips. Anything but what we are doing to these kids ... our school system has honestly failed those three kids. I feel guilty for them because I am part of the school system and we are not doing anything for them. (Teacher Interview C, Part 2)

Ms. Peters' general concern for her remedial students appears very genuine, although her classroom practices did not seem to reflect this concern. This anomaly can perhaps be explained in part through recalling Ms. Peters' responses to the TIBT and Harvey's (1974) descriptions of the System-types into which she was classified (see Appendix G). According to her secondary System (2), Ms. Peters may be expected to make "positive statements about the underdog" but, according to her primary System (1), she may also be expected to reject things "if they do not meet her high standards or ideals of perfection." (see Appendix G).

That Ms. Peters did reject (probably quite unconsciously) her remedial students is supported by one classroom observer who summarized:

> The data for this classroom reveal that high expectancy children were more active in practically all aspects of classroom interaction. They made more unsolicited comments and asked more questions during large group instruction, and they demanded more teacher attention during those times reserved for individual assistance. In view of the tendency for highs (expectancy children) to create more response opportunities for themselves, it might be expected that the

> teacher would attempt to balance opportunity when the initiation of interaction was under her control. This, however, was not the case.... The evidence is strong that the teacher's first priority was the success of those children for whom she held high expectations (Muttart, 1977: 92).

Perhaps a contributing factor in Ms. Peters' failure to cater effectively to the needs of her remedial students was her inability or discomfort in utilizing small group instructional methods. In any event, it is perhaps not surprising that, when asked to select pupils according to Silberman's (1969) criteria, Ms. Peters chose three of her five remedial students for "rejection", and a fourth one for the "indifference" category. Also, in sorting pupils according to their attitudes towards classroom activities, she placed all five remedial students in the "passive" category.

Not all of Ms. Peters' attention was directed to her bright students, and she did not appear to belittle or intimidate her remedial students. But she did not meet the needs of her "group of five", and neither did she appear to seriously attempt so to do. In short, there is little evidence that Ms. Peters' classroom practices and behaviours supported her most strongly asserted goal -- "to get the most out of each child in that room" -- and there is considerable evidence that she neglected the needs of her most handicapped students.

The next section will introduce the case study pupil from Ms. Peters' class.

## The grade six pupil: Stuart Pearson

### Influence of the home and attitudes toward school

Stuart Pearson was born in a small town in the south of England and emigrated to Canada with his parents and two sisters in his preschool years. The Pearsons had moved to Westham early in 1975, and Stuart entered grade five in Jamieson School at that time. He was the youngest pupil in his class and was 10 years and 10 months old at the time of the investigation.

Slightly built, of average size, with a shock of dark hair, wearing thick-rimmed glasses, and often with an intense expression, Stuart's appearance well suited the image of the capable and serious student. A positive and purposeful attitude toward education could certainly be expected of any of Mr. and Mrs. Pearson's children, for their own attitudes were very supportive of public schooling. They had placed Stuart, their second child and only son, in kindergarten prior to regular school. They had enrolled him first in piano classes, and more recently in violoncello classes. Stuart had developed sufficient interest and skill in the cello to enjoy his music and achieve some success at music festivals and in competitions. But he was an active, healthy boy who also enjoyed games of soccer and football, and generally wrestled and played with other boys at school during recess and lunch breaks.

Although Mrs. Pearson had spent one year at college, since marrying she had devoted herself fulltime to the role of homemaker. Mr. Pearson was a professional engineer with four years of university education. The parents considered that Stuart was doing "much better than most other children of the same age" in his schoolwork, and that he would complete four years of college or university education (PATES). At the time of this investigation, Mr. and Mrs. Pearson were "not concerned ... at all" with forecasting Stuart's future work or occupation, but Stuart expressed an interest in being an archaeologist (Pupil Interview C).

Of all the pupils in her class, Ms. Peters considered that Stuart would:

> Do the very best. His home life is terrific, and his parents are behind him. He's a young boy and seems to be able to adjust, although he's only ten, with the rest of the kids. He seems to be able to adjust to the social problems that some of the children have. He's got ability to learn and an ambition and he's always working, always wants to learn things, and always wants to know things. (Teacher Interview C, Part 2).

But Ms. Peters also noted a need for caution. After Stuart had handed in a below-par report, Ms. Peters made some enquiries and found that Stuart was not only attending music lessons and festivals but, amongst other things, he was also delivering newspapers and flyers in order to earn pocketmoney. Ms. Peters pursued the matter with Mrs. Pearson, who cooperated by reducing Stuart's out-of-school commitments.

In answer to a parent questionnaire, Mr. and Mrs. Pearson revealed strong support for the view that school had played a very beneficial part in their lives. Typical of their responses was their "strong agreement" with the statements that "The best way to get a good job is to get a good education", and "The interests I developed while I was in school still provide me with enjoyment" (PATES). On the other hand, they were somewhat critical of schools where "students don't like school," and of teachers who "don't make the pupils behave themselves as well as they should" (PATES). Stuart's attitude towards schoolwork and his behaviour in school were apparently true reflections of his parents' serious approach towards education and their faith in the school as the instrument of education. In the current school year, Stuart had missed only eight days of school, and had not given cause to be severely reprimanded by his teachers or disciplined by the principal.

Table 34 presents a summary of Stuart's attitudes towards his parents and his school. His attitudes were generally positive and, in almost every case, his questionnaire scores greatly exceed the class means. Stuart's responses to items on the SEI support Ms. Peters' statement that he had a "terrific" home life. Stuart felt that he had "a lot of fun" with his parents; that he did not "get upset easily at home"; that his parents usually considered his feelings; that his parents did not "expect too much" of him; that his parents understood him; and that his parents were not "pushing" him. On the negative side, he also checked that there were many times when he'd like to leave home, but this sentiment was shared by 18 of Stuart's 25 classmates and appears to be a typical response of children of his age and should probably not be given a completely negative interpretation.

Stuart's positive attitudes towards school probably stem in part from his success as a student and his own self-esteem. According to the SEI, and in spite of his comparative youth, he was the most self-assured pupil in his class, especially in matters concerning his intellectual abilities and the qualities of tenacity, confidence, and purposefulness which are required in order to excel. But, although he expressed some ambivalence in his responses to such PCAS items as "School lessons are boring" -- "Sometimes," and, "We spend too much time doing arithmetic" -- "Sometimes," Stuart was most unequivocal in his assessment of the importance of doing well at school. For example, "I would like to be better at gym than at schoolwork" -- "No", "I work and try very hard in school" -- "Always," "I would like to be one of the cleverest pupils in the class" -- "Yes," and "Doing well at school is most important to me" -- "Yes." (PCAS).

| | Factor | | | Complete instrument | |
|---|---|---|---|---|---|
| Instrument | Title | Stuart's score (max) | Class mean (SD) | Stuart's score (max) | Class mean (SD) |
| SEI | home self-esteem (parents) | 14 (16) | 8.72 (4.07) | 86 (100) | 59.04(15.29) |
| | school self-esteem (academic) | 14 (16) | 8.08 (3.72) | | |
| WSAT | general school attitude | 27 (33) | 23.48 (3.71) | 114[a] (138) | 102.12(10.91) |
| PCAS | attitude to school | 4 (6) | 3.72 (1.45) | 64 (84) | 52.17 |
| | importance of doing well (school) | 10 (10) | 7.48 (1.60) | | |
| | anxiety in the classroom[b] | 2 (6) | 2.28 (1.55) | | |

[a] scores between 100 and 138 = positive response to school (McCallon, 1973)

[b] high score = less anxious

Table 34. Attitudes of Stuart and his classmates toward selected home and school factors.

In addition to his positive attitudes towards the importance of doing well at school, Stuart had very positive attitudes towards his class and Ms. Peters, his teacher (see Table 32, p.239). He was quite emphatic in claiming his class to be the "nicest of all," and in stating that he would rather be in his class than any other, that other children would enjoy being in his class, and that he was happy and liked being in his class (PCAS). These very positive statements were supported by his responses to all nine items in the MCI instrument which relate to satisfaction with the class, and of the class' satisfaction with the school (see Table 32). To such statements as: "Most children say the class is fun," and "The pupils enjoy their schoolwork in my class," Stuart's answer was a resounding "Yes" (MCI).

Stuart's general school attitude was less positive than his attitude towards his class (see Table 34). But it is interesting to note that his most negative response was given to the item "My school is noisy" -- "Most of the time." Stuart's classroom certainly was frequently a noisy place to be during afternoon classes, as attested by the classroom and Shadow Study observers, and a serious student would doubtless have found this irksome. To such items as "I like my school," "My school is beautiful," and "My school is a happy place to be," Stuart responded -- "Some of the time." To such items as "I am happy with the work I am doing," "I like the teachers in my school," and "Going to school is fun," he responded -- "Most of the time" (WSAT).

In some of his responses to items which contained an element of speculation, Stuart seemed to respond cautiously rather than negatively. Items on PCAS, for example, proposed "I bet going out to work is better than school," and "I would leave school tomorrow if I could," Stuart's response in both cases was -- "Not sure." In dealing with topics where his own experiences or opinions were sufficiently strong guides, Stuart did not equivocate, for example, "Going to school is a waste of time" -- "No," and "I like school" -- "Yes" (PCAS).

In view of Stuart's very positive attitudes toward his teacher and his class, it is surprising to find (from Table 34) that he was very anxious in the classroom situation (PCAS). An examination of the individual items in this factor offers a possible explanation. Stuart was quite emphatic that school work did not worry him, and that he never felt scared when his teacher asked him questions about his work. On the other hand, he admitted that "I would feel a little afraid if I got my spelling or arithmetic questions wrong" and "It would bother me if I got my work wrong." A reasonable interpretation of Stuart's responses seems to be that he was not normally anxious in the classroom situation because he was a very successful student who was almost always correct in his work. If this were the case, then of course finding an error (especially in work which he usually found easy and in which he was successful) could be a legitimate cause for concern.

It should be acknowledged that, on the whole Ms. Peters' students were rather anxious. An examination of the individual items of the PCAS factor suggests that the anxiety felt by many of the students was based on their fear of falling short of their own expectations and standards rather than a fear of ridicule or punishment from Ms. Peters. An additional possible cause for anxiety in Ms. Peters' class was the practice of encouraging critical comment from classmates following an oral presentation to the class by a pupil. (The classroom observer noted that peer criticism focused on both substance and manner of delivery.)

The general impression presented above of Stuart as a serious, capable, and interested student who enjoyed school in a quiet, restrained manner, is supported by classroom observation of his behaviour, and by the Pupil Interview. On the day of the Shadow Study, Stuart was suffering from a head cold. To add to his discomfort, during the day the room temperature rose to 28°C. In the course of the day, the classroom observer noted that there was much noisy, off-task, and frequently rambunctious behaviour. In spite of all these drawbacks, repeatedly throughout the specimen descriptions of Stuart's behaviour the observer noted that Stuart was "engrossed" in his work, that he "works with interest" and was "working almost as hard as anyone can under the circumstance" (of suffering from a cold in a room temperature of 28°C) -- and this latter comment was made at 2:10 p.m., with only one hour of school remaining .

The observer noted also that Stuart interacted pleasantly with several other pupils. Much of the interaction was on-task, but some was inspired by Stuart's artistic talents in drawing a recognizable caricature of a classmate on the class mural during art lesson. Other social interactions seemed to be incidental and were usually very brief. The impression was gained that Stuart controlled the amount of off-task behaviour he was prepared to be involved with. Put in more positive terms, Stuart seemed to be able to respond to the work ethic that if there is a task to be done, then it should be done. Evidence of this ethic in operation occurred during the morning recess of the Shadow Study day: in spite of the hot, stuffy classroom, and in spite of the company of two friends, Stuart, of his own volition, remained unsupervised and on-task in the classroom in order to complete work assignments

## The social setting

Ms. Peters' class comprised 26 pupils, only seven of whom were girls. The seventh girl had joined the class from another school towards the end of May in the current school year. The class ranged in age from one boy who was almost 13, and who was repeating grade six, to Stuart, who was just under 11 at the time of this investigation. The children's backgrounds varied quite widely: half the class had been born in various towns and cities in Alberta, two were from other Western provinces, five were from Eastern provinces, four were immigrants from Britain, and two had been born of Canadian parents in West Germany. Some children, although born in Canada, were of European immigrant parentage.

At the beginning of the current school year, the administrators of Jamieson School had decided to allocate Ms. Peters 20 of the brightest grade six students, and five very low achievers who were in need of special remedial reading assistance. The total D.I.Q. (CLT) scores for the class ranged from a low of 72.5 to Stuart's high of 138. The mean D.I.Q. for the five low achievers was 87.5: the mean D.I.Q. for the remainder of the class was118.33. All five low achievers were boys. The combined factors of high/low achievers and uneven boy/girl distribution made for a very lopsided social class structure. Probably because of their numerical supremacy in both cases, the class seemed to have many of the charactersitics of an academically superior, all-male class.

It has been seen that Ms. Peters' pupils had generally very favourable attitudes towards the class, but less favourable attitudes towards school (Tables 32, p.239 and 34, p. 263). Most pupils regarded "doing well at school" as of considerable importance, and this particular attitude may be related to the generally high SES of the class. (Stuart's father was rated at 74.27 on the Blishen scale, compared with a class mean of 49.5 -- S.D. 13.7.) Attitudes held by Ms. Peters' pupils towards her and their class as a social unit are presented in Table 35. Pupils' perceived relationships with Ms. Peters (PCAS) and student-instruction interaction (WSAT) were both rated highly by pupils, indicating a generally very positive attitude towards Ms. Peters and her role as teacher. An examination of the scores of the remedial students as a group compared with the remainder of the class did not reveal any wide discrepancies on these measures.

The MCI factors presented in Table 35 seem somewhat self-contradictory. Whereas students were conscious of significant amounts of friction and competitiveness in their class (Stuart's scores on these measures were particularly high), they also perceived a slightly greater amount of cohesiveness in the class. This last measure is supported by related factors from both the SEI (social self) and the WSAT (interpersonal relations). Perhaps these results can be reconciled if friction and competition are not assumed to be negative qualities or, from the pupils' perspective, unwanted characteristics of the class. Much of the social interaction witnessed by the classroom observers was recorded as "horseplay" (and included such activities as arm-wrestling) and, although this may be interpreted as evidence of friction and competition, such activity is typically regarded as "fun" by children, especially boys, of this age.

| Instrument | Factor | | | Complete instrument | |
|---|---|---|---|---|---|
| | Title | Stuart's score (max) | Class mean (SD) | Stuart's score (max) | Class mean (SD) |
| MCI | friction | 27 (16) | 20.20 (4.56) | 109 (100) | 96.32 (7.29) |
| | competitiveness | 23 (27) | 19.56 (4.68) | | |
| | cohesiveness | 19 (27) | 21.28 (4.15) | | |
| WSAT | interpersonal relations | 20 (27) | 20.12 (3.49) | 114[a] (138) | 102.13 (10.91) |
| SEI | social self-esteem | 12 (16) | 10.00 (3.62) | 86 (100) | 59.04 (15.29) |
| PCAS | social adjustment to others | 3 (5) | 3.04 (1.11) | 64 (84) | 52.17 (9.85) |

[a] scores between 100 and 138 = positive response to school (McCallon, 1973)

Table 35. Attitudes of Stuart and his classmates toward selected factors related to the social setting of Room 16.

From Figure 19 it is evident that three children are foci on the social scene in Room 16. It is perhaps surprising to note that one of these three is a girl, Darlene (number 24), and that she attracts first choices from several boys on all three sociometric measures (preferences for sitting near, working with, and playing with classmates). A partial

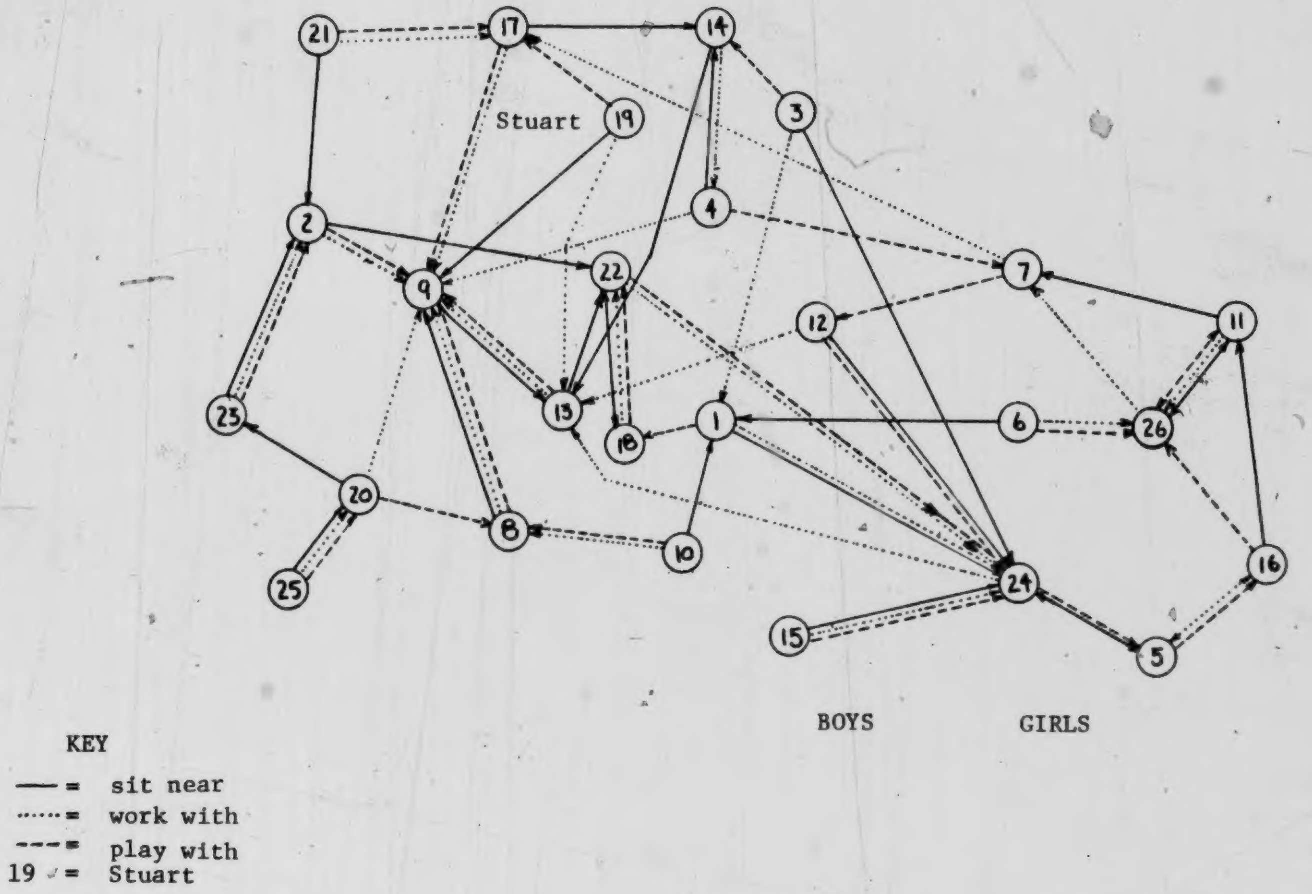

21
17
14
Stuart
19
3
2
4
22
9
7
12
11
13
18
1
6
26
23
20
8
10
24
16
25
15
5
BOYS
GIRLS
KEY
—— = sit near
······ = work with
- - - = play with
19 = Stuart

Figure 19

Sociogram of Ms. Peters'
Grade Six Class based on first choices of three Measures.

explanation for Darlene's popularity may be found in her ability to interact with boys on their terms. In one instance, for example, some boys were observed to be indulging in an arm-wrestling contest. Darlene was then matched against one of the boys and beat him. One onlooker was heard to say that, amongst the other grade six classes, Darlene was known as "Moose" (Shadow Study Summary C). Darlene, it will be recalled, was also the unperturbed subject of Stuart's mural caricature. Thus, the earlier description of the class as having the characteristics of an all-boy class is not lessened by the apparent dominance of one of the girls, for she behaved in a manner more often expected of boys. In addition to Darlene, two other girls were involved in cross-sex preferences and, in fact, there was little evidence of sex antagonism in the class, perhaps because of Darlene's strong personality and popularity and because "The girls have little influence in the class because they are vastly outnumbered" (Anecdotal Notes C, 2).

Stuart was one of six boys and one girl who received no first choice preferences from classmates on the three sociometric measures. Ms. Peters had also noted that Stuart, amongst others, was somewhat isolated from his classmates. During the Teacher Sort Task Interview (C, Part 1) she commented:

> Now Stuart, Andrew, and George -- these are three loners. They don't have any friends, and yet the three of them seem to get along fairly well together. In the parent-teacher interviews, all the parents of these three students complained that their children were by themselves and they were quite worried.... All three of them are very independent and won't listen to anyone's suggestions.

Much easy-going social interaction was generally observed in Room 16, however, with the exception of George -- number 25 (Anecdotal

Notes C, 1 and 2). George was identified by Ms. Peters as not "getting along with other kids -- he doesn't know how to get along" (Teacher Interview C, Part 2). George, in fact, was receiving counselling for his social handicap of not being able to make and keep friends.

Apart from sex differences, another factor which may have been expected to give rise to social disharmony was the distinction between the remedial students and the rest of the class. From Figure 19, it is evident that the remedial students (numbers 3, 10, 20, 21, and 23) received very few first choice preferences, and those that were recevied came from other remedial students or George. According to Ms. Peters, she took pains to ensure the integration of the remedial students (Teacher Interview C, Part 1). And, according to the classroom observers, from a social viewpoint, Ms. Peters was successful in achieving integration:

> While in the class I did not see any indication of top versus bottom groups. She (Ms. Peters) addressed them all together, discussed with them, etc. Their instructions were all the same concerning work. The teacher (Ms. Peters) told me that there do not seem to be any incidences of isolation of one group by another. Differences are based more on personality clashes rather than abilities. (Anecdotal Notes C, 2)

A more detailed examination of Stuart's social relationships is presented in Table 36. As distinct from Figure 19, Table 36 contains first, second, and third choices on four sociometric measures -- the three included in Figure 19 plus a statement of whom the subject actually played with. The table helps support two earlier observations concerns the nature of the social climate of Room 16. First, although Stuart was not accorded any first choice preferences by his classmates, it is obvious that he did not lack social contacts -- a total of 17 classmates on all measures. Stuart actually made contact with or was contacted by a total

| Test item | | | Classmates identified by ID number and sex | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1<br>M | 2<br>M | 3<br>M | 4<br>M | 8<br>M | 9<br>M | 10<br>M | 12<br>M | 13<br>M | 14<br>M | 17<br>M | 18<br>M | 20<br>M | 21<br>M | 23<br>M | 24<br>F | 25<br>M |
| 1. sit near | | | | | | | | | | | | | | | | | | | |
| | a | written test | 3rd | 2nd | | | | 1st | | | | | | | | | | | |
| | | pupil interview | | 3rd | | | | 2nd | | | 1st | | | | | | | | |
| | | Shadow Study | | | | | | 1 | | | | | | | 1 | 1 | | | |
| | b | written test | | | | 3rd | | | | | | | 3rd | | | | | | 2nd |
| | | Shadow Study | | 2 | | 1 | | | | | | | | | | | | | |
| 2. work with | | | | | | | | | | | | | | | | | | | |
| | a | written test | | 2nd | | | | 3rd | | | 1st | | | | | | | | |
| | | pupil interview | | 3rd | | | | 2nd | | | 1st | | | | | | | | |
| | | Shadow Study | | 6 | | 1 | | | | | | 1 | | | | | | 1 | |
| | b | written test | | 3rd | 2nd | | | | | | | 2nd | | | | | | | 2nd |
| | | Shadow Study | | 3 | | 1 | | | 1 | | | | | | | 1 | | | |
| 3. like to play with | | | | | | | | | | | | | | | | | | | |
| | a | written test | | 2nd | | | | 3rd | | | | | 1st | | | | | | |
| | | pupil interview | | 3rd | | | | 2nd | | | 1st | | | | | | | | |
| | b | written test | | | | | | | | | | | | | | | | | 2nd |
| 4. actually play with | | | | | | | | | | | | | | | | | | | |
| | a | written test | | 1st | | 2nd | | 3rd | | | | | | | | | | | |
| | | pupil interview | | 2nd | | 1st | | | | | 3rd | | | | | | | | |
| | | Shadow Study | 1 | 2 | | | 1 | | | 1 | | | | 1 | | | 1 | | |
| | b | written test | | | | 2nd | | | | | | | | | | | | | |
| | | Shadow Study | 1 | 2 | | | | | 1 | | | | | 1 | | | | | |

a = Stuart's choice; b = chosen by classmates

Notes: Ranking indicates order given (written test) or mentioned (interview). Cardinal numbers indicate number of times behaviours observed.

Table 36. Comparisons among the sociometric verbal tests, interviews, report of friends, and observed social interactions of Stuart.

of eight classmates on 34 separate occasions in the course of the day of the Shadow Study, which may be interpreted as a minimal indication of the general cohesiveness and camaraderie of Ms. Peters' class. Second, Stuart's contacts included all five remedial students as well as several of the high achieving students and one girl. These contacts were all of a friendly nature and support the notion of integration desired by Ms. Peters.

Stuart's verbal (Pupil Interview C) choices of friends generally support his written selections, but not in the detail of rank order. There is strong consistency in Stuart's relationship with Darren (Number 2), although his choices were not strongly reciprocated by Darren, except insofar as observed contacts (Shadow Study Notes C) are concerned. An explanation of the frequency of observed contacts between Darren and Stuart arises from the social studies report assignment which they shared and which reached completion on the Shadow Study day. (Much of the morning of the Shadow Study day was spent on this project by the whole class.) It is interesting that, during the Shadow Study, Stuart chose to remain working at his desk during the morning recess, and that Darren (a high-achiever) and Phillip (a remedial pupil) both remained with Stuart, apparently content to observe and occasionally chat with him.

During the Pupil Interview, Stuart mentioned that Darren was "a close friend," and "probably my best friend in the class." But, in answer to the interviewer's question: "How come you two got together (to work on the social studies project)?" Stuart replied:

> I don't really know. I just picked him because he was probably the best worker. I can't work very well with Doug -- I just don't like working with him because he fools around quite a lot (Pupil Interview C).

Stuart's serious approach to his schoolwork is further indicated by his selection of Dean (number 13) particularly as someone to work with (and this was the only selection which was exactly repeated in both his written and verbal selections). Ms. Peters described Dean as:

> A boy who works really hard. He just never stops working -- he continually works, and yet he doesn't have that many good skills... his ideas are there (but) ... I guess he really doesn't have very much organization in his own mind, he just writes, and writes, and writes. (Teacher Interview C, Part 2)

It seems likely that Stuart was attracted to Dean, at least in part, by Dean's serious approach to his studies, even though Dean was of only "average ability" (Teacher Ranking, Form C). Dean was a focus for the attention for several of his classmates, including the high-achieving boys and Darlene. Concerning Dean, Ms. Peters observed:

> The boys respected Dean ... outside in the playground the kids really like him and he's just a boy ... but when he's in school he's a real adult -- he sits down and really works (Teacher Interview C, Part 2).

Stuart also chose Bryan (number 9) as someone he would like to sit near, work with, and play with. According to the sociometric tests, Bryan was the most popular boy in the class. Ms. Peters' assessment of Bryan was:

> A good worker, and he tries ... his ambition is probably going to get him where he wants to go because he wants to be a good student. He's just a nice kid to have around -- very sensible ... he's very responsible. He always contributes a lot to the class discussion and all that sort of thing (Teacher Interview C, Part 2).

Stuart mentioned Dean, Bryan, and Darren as three classmates he would like to sit with, work with and play with. When asked why, he said, "Because I like them quite a lot" (Pupil Interview C). He said that all three worked, but that Dean was probably the best worker. When asked who he actually played with, Stuart omitted Bryan's name and added Andrew's. His explanation for this was that Bryan did not live near him, and so made playing together after school difficult (Pupil Interview C). Ironically, although Andrew was mentioned by Stuart as someone he actually played with, he was not selected on any of the other sociometric tests, Andrew, however, chose Stuart as someone he would like to sit near. It is possible that, amonst other things, convenience is an important factor in children's friendships: that is, for a friendship to flourish, the children need to be located close to each other in class and/or in where they live.

In summary, it seems that Stuart enjoyed the camaraderie and some of the "horseplay" of Room 16 (he even selected Jim, number 1, as someone he would like to sit near, and Jim had a reputation for mischief-making). But that he saw the prime purpose of school was to study and to learn, and that his role was to be a good student. In order to be a good student, Stuart controlled his social contacts and selected his friends and partners accordingly. For Stuart, this task was not difficult as he actually enjoyed much of his schoolwork, and had several classmates whose inclinations to study and whose academic abilities matched his own. It is pleasing and perhaps surprising to note that Stuart maintained this mature approach to school in spite of being the youngest in his class, and in spite of the poor examples supplied by some of his classmates, especially in afternoon classes. Stuart certainly gave the impression of self-sufficiency, stability, and maturity in the social setting of Room 16.

## Academic attributes, ability, and achievement

When asked to describe the scholastic ability of her class, Ms. Peters said:

> They are a very bright class. I have a big range of ability, but I only have five children who have been assessed as having problems with reading and that sort of thing .... (Teacher Interview C, Part 1).

Ms. Peters' assessment of her class was based on her work with and experience of her pupils up to May 11 of the current school year. The accuracy of her assessment was supported by the two classroom observers who commented on the high quality of the pupil work displays, and on the "simply excellent" quality of writing which was observed during regular lessons (Anecdotal Notes C, 1 and 2). Her assessment was also supported by the results obtained on the CLT administered to the pupils in June of the current school year. These results are summarized in Table 37.

From Table 37 it is seen that the scholastic attributes of Ms. Peters' class were indeed wide-ranging but, in spite of the low scores of the five remedial pupils, the class mean for the total D.I.Q. was 113.08 (S.D. 15.31). It is evident that the class as a whole scored higher on the nonverbal than on the verbal items, and that the range of scores reached greater extremes for the nonverbal items. Stuart's scores, although high on both sets of items, were markedly higher (the highest in the class) on the verbal D.I.Q., his nonverbal score placed him at equal fifth in his class, however. (It will be recalled that Stuart was the youngest member of his class at 130 months -- class mean 143.36 months.)

| Item | Stuart | | Class (N = 24)[a] | | |
|---|---|---|---|---|---|
| | value | rank[b] | mean score | (SD) | range |
| verbal D.I.Q. | 145 | 1st | 110.50 | (17.36) | 76 - 145 |
| age equivalent | 16y.1m. | | | | 9y.6m.-16y.1m. |
| grade equivalent | 10.02 | | | | 4.4 - 10.2 |
| grade percentile | 99 | | | | 6 - 99 |
| nonverbal D.I.Q. | 131 | 5th (1) | 115.29 | (15.98) | 69 - 143 |
| age equivalent | 14y.11m. | | | | 7y.6m.-18y.6m. |
| grade equivalent | 9.4 | | | | 2.7 - 11.9 |
| grade percentile | 96 | | | | 4 - 99 |
| total D.I.Q. | 138 | 1st | 113.08 | (15.31) | 72.5 - 138 |

[a] the class N may vary in Tables 37 to 42 because of absences and/or changes in the class complement

[b] figure in parentheses indicates number of classmates at equal rank

Table 37. Stuart's results and class rank, with class means, standard deviations, and ranges on selected items of the Canadian Lorge-Thorndike Intelligence Test (Level D, Form 1), June, 1976.

The MAT (Form F) was administered to the class in the fall, 1975. For various reasons, results were obtained for only 17 pupils who continued in the class to the end of the school year. The results obtained from this test are summarized in Table 38. From Table 38 it may be seen that the class mean scores on the various MAT items are uniformly high. As may be expected, Stuart's scores are among the highest in his class, including first rank place in reading and spelling. His scores on the nonverbal items are slightly lower, as also reflected in his class rankings.

| Item | Stuart | | | Class (N = 17) | | |
|---|---|---|---|---|---|---|
| | std. score | rank[a] | grade equiv. | mean score (SD) | mean gr. equiv. | (SD) |
| word knowledge | 101 | 5th | 9.8 | 92.24 (13.21) | 8.0 | (1.8) |
| language | 92 | 4th | 7.8 | 89.29 ( 7.15) | 7.4 | (1.3) |
| reading | 111 | 1st (1) | 9.8 | 92.77 (11.79) | 8.0 | (1.7) |
| spelling | 107 | 1st | 9.8 | 88.47 (13.50) | 7.1 | (2.1) |
| total reading | 107 | 4th | 9.8 | 93.47 (14.10) | 7.9 | (1.8) |
| math computation | 98 | 5th | 7.7 | 90.12 | | |
| math concepts | 98 | 4th (3) | 8.9 | 92.24 | | |
| math problems | 93 | 9th (1) | 7.1 | 91.18 | | |
| total math | 100 | 4th (3) | 7.6 | 94.88 | | |

[a] figures in parentheses indicate number of classmates at equal rank

Table 38. Stuart's standard scores, class rank, and grade equivalents, with class means and standard deviations, on selected items of the Metropolitan Achievement Test (Form F), September 1975.

Form G of the MAT was administered to the class in June, 1976. The results of this test are summarized in Table 39. Unfortunately, scores were not available for mathematics at this time, although social studies scores were obtained. A comparison of the class mean scores in Tables 38 and 39 shows that Ms. Peters' class improved on all language arts items in the course of the year. Furthermore, the standard deviation was reduced for almost all items. In view of Ms. Peters' expressed concern for teaching language arts, even to the point of including much of the social studies time and learning activity as language arts, this result may have been expected. What is perhaps unexpected, however, is the substantial drop in Stuart's class ranking on three of the four items on the test.

Stuart's lower ranking is unexpected because of his high performance on the verbal portion of the CLT (see Table 37, p. 278) which was administered just three days prior to the writing of the MAT. It is also unexpected because of his previous superior performance on the MAT, administered in 1975 (see Table 38, p. 279). But perhaps the most compelling reason to regard Stuart's performance on the language arts items of the MAT (1976) as surprising is Ms. Peters' assessment of Stuart's achievements or expected achievements as summarized in Table 40.

Ms. Peters was asked to rank order her pupils according to how well they achieved or how well she considered they would achieve in three respects: one, in language arts; two, in social studies; and, three, the extent to which they would "do well in school." Ms. Peters' responses are presented in Table 40. From Table 40 it is evident that

| Item | Stuart | | | Class (N = 24) | | | |
|---|---|---|---|---|---|---|---|
| | std. score | rank[a] | grade equiv. | mean score | (SD) | mean gr. equiv. | (SD) |
| word knowledge | 106 | 4th (2) | 9.9 | 94.29 | (12.96) | 8.3 | (1.6) |
| language | 93 | 14th (1) | 8.0 | 93.75 | (8.64) | 8.1 | (1.6) |
| reading | 97 | 14th (1) | 9.3 | 96.88 | (10.50) | 8.7 | (1.6) |
| spelling | 101 | 7th | 9.8 | 91.42 | (12.57) | 7.7 | (1.9) |
| total reading | 103 | 7th | 9.9 | 96.58 | (11.64) | 8.6 | (1.6) |
| social studies | 40[b] | 5th (1) | 9.9 | 36.13 | (6.19) | 8.6 | (1.5) |

[a] figures in parentheses indicate number of classmates at equal rank

[b] this item is given as a raw score

Table 39. Stuart's standard scores, class rank, and grade equivalents, with class means and standard deviations, on selected items of the Metropolitan Achievement Test (Form G), June, 1976.

| Projected rank in class (N = 31) | |
|---|---|
| item | rank |
| language arts | 1st |
| social studies | 1st |
| overall | 1st |

Table 40. Stuart's rank in class according to Ms. Peters' perception of her students' achievements on selected measures, May, 1976.

Ms. Peters rated Stuart's work extremely high, and had great faith in his ability to achieve scholastically in the future. It is not clear why Ms. Peters held these expectations in spite of Stuart's comparative decline in standing. (It should be noted that Ms. Peters' assessments were made in May, 1976 -- before the students had written either the intelligence test or the second MAT.) It is possible that, in spite of the indications of the tests, the nature and quality of Stuart's classwork and written projects required by Ms. Peters were not dependent on test-success skills, and still in fact out-ranked those of his classmates. It is also possible that the high opinion of Stuart Ms. Peters formed early in the school year (perhaps based partly on Stuart's high performance in the September MAT) persisted in spite of subsequent lower achievement by Stuart or, as seems to be indicated by Table 39, comparatively higher achievement by his classmates. It has been previously pointed out that Ms. Peters was very conscious of Stuart's youth and also considered him a very fine student.

Ms. Peters' assessments of Stuart's attitude towards classroom learning activities and his academic ability are presented in Table 41. Ms. Peters was asked to rate all her pupils on various measures using a five-point scale for each measure. From Table 41 it is seen that Stuart was considered one of eight "enthusiastic" and one of six "very bright" students in the class. It is interesting to note that Ms. Peters did not consider any of her pupils "dull", the fact of having five remedial students notwithstanding.

| Item | Placement of pupils on various 5-point scales (N = 26) | | | | |
|---|---|---|---|---|---|
| perceived achievement level cf expectations for LA | greatly exceeded | 10 exceeded -- 7th[a] | 9 met | 7 below | far below |
| perceived achievement level cf expectations for S.S. | greatly exceeded | 11 exceeded -- 2nd[a] | 9 met | 6 below | far below |
| perceived attitude toward classroom teaching | 8 enthusiastic[a] | 11 interested | 5 passive | uninterested | resistant |
| assessment of academic ability | 6 very bright[a] | 9 bright | 5 average | 5 below average | dull |

[a] indicates Stuart's placement

Table 41. Ms. Peters' placement of her pupils on various 5-point scales according to her perceptions of them on selected measures, May, 1976.

Table 41 also contains Ms. Peters' rating of her students according to how well they achieved the goals in language arts and social studies she had for them as individuals in the course of the current school year. From the table it is seen that Stuart was ranked seventh of 10 students who "exceeded" Ms. Peters' expectations (no pupils "greatly exceeded" her expectations on this measure). This ranking seems to indicate that Ms. Peters may have been reacting to Stuart's comparative slippage in language arts achievement when making this assessment, although she was not sufficiently conscious of his apparent decline in achievement or impressed by it when asked to rank her pupils on their achievements (see Table 40). In social studies (also from Table 41) Stuart was ranked second of 11 students who "exceeded" Ms. Peters expectations (again, no students "greatly exceeded" her expectations). The student who outranked Stuart was Darren, his partner for the final social studies project. Apparently, Ms. Peters' expectations were higher for Stuart than for Darren, thus accounting for Darren's higher ranking for a joint effort which presumably also surpassed that of other pupils.

Ms. Peters' assessment of Stuart in social studies (presented in Table 41) is consistent with her first place projected ranking of him as indicated in Table 40, but is apparently not justified by Stuart's score on the June, 1976 MAT (see Table 39). Of course, the criteria for excellence held by Ms. Peters are not necessarily identical to those assumed by the test and, in fact, Ms. Peters' assessment may be the more realistic in terms of her intended learning outcomes.

In this investigation, it was not possible to obtain detailed or standardized scores for subject areas other than those already presented. In order to gain an impression of Stuart's and his classmates' performance in other areas of the curriculum, individual School Progress Reports were consulted and their contents are summarized in Table 42. Stuart's superior performance in "group participation," "individual participation," and "working skills" and in language arts and social studies "effort" and "achievement," as assessed by Ms. Peters, is evident from Table 42. The first report (Winter, 1975) indicates that Stuart, in easily surpassing the class mean score on all the measure mentioned above, actually achieved approximately 75 percent of the possible maximum score for each measure. But on the second report (Summer, 1976),

| Item | Max. score | Winter, 1975 | | | Summer, 1976 | | |
|---|---|---|---|---|---|---|---|
| | | Stuart's total score | class mean | (S.D.) | Stuart's total scores | class mean | (S.D.) |
| group participation | 16.0 | 12.0 | 9.57 | 2.72 | 16.0 | 11.26 | 3.00 |
| individual participation | 16.0 | 14.0 | 10.39 | 2.53 | 16.0 | 11.38 | 3.39 |
| working skills | 12.0 | 9.0 | 7.74 | 1.82 | 12.0 | 8.78 | 2.58 |
| LA effort[a] | 24.0 | 18.0 | 14.83 | 2.10 | 24.0 | 18.02 | 3.49 |
| LA achievement[a] | 24.0 | 18.0 | 14.09 | 2.67 | 24.0 | 16.80 | 4.63 |
| S.S. effort[a] | 4.0 | 3.0 | 2.59 | 0.52 | 4.0 | 3.12 | 0.65 |
| S.S. achievement[a] | 4.0 | 3.0 | 2.44 | 0.76 | 4.0 | 2.90 | 0.75 |
| Math effort | 4.0 | 2.0 | 2.17 | 0.52 | 2.0 | 2.84 | 0.85 |
| Math achievement | 4.0 | 2.0 | 2.09 | 0.60 | 3.0 | 2.74 | 0.99 |
| Science effort | 4.0 | 2.0 | 2.00 | 0.30 | 3.0 | 2.76 | 0.78 |
| Science achievement | 4.0 | 2.0 | 2.17 | 0.72 | 3.0 | 2.76 | 0.78 |
| Oral French effort | 4.0 | 3.0 | | | 3.5 | | |
| Oral French achievement | 4.0 | 3.0 | | | 3.5 | | |
| P.E. effort | 4.0 | 2.0 | | | 2.0 | | |
| P.E. achievement | 4.0 | 2.0 | | | 2.0 | | |
| Art effort | 4.0 | 2.0 | | | 3.0 | | |
| Art achievement | 4.0 | 2.0 | | | 3.0 | | |
| Music effort | 4.0 | 2.0 | | | 3.0 | | |
| Music achievement | 4.0 | 2.0 | | | 3.0 | | |

[a] subjects taught by Ms. Peters

Note: class means were not available for all items

Table 42. Stuart's scores for "effort" and "achievement", with class means and standard deviations, obtained from the School Progress Report.

the class mean scores were considerably higher, and Stuart achieved maximum scores on all measures. Stuart, in fact, was the only pupil in his class to be awarded maximum scores on all measures assessed by Ms. Peters. In the anecdotal sections of the report card, Ms. Peters made the following comments:

> Stuart is a very mature, thoughtful boy who contributes a lot towards our class discussion (January, 1976).
>
> Stuart is a very hardworking, conscientious student. He is making excellent progress in all areas of Language Arts. Keep up the good work, Stuart (January, 1976).
>
> An excellent year's work (in language arts), Stuart. Keep up the good work in grade VII (June, 1976).
>
> Stuart's strength in the Language Arts contributes toward his success in Social Studies (January, 1976).
>
> It was a pleasure having you in my class, Stuart. Good luck in grade VII (June, 1976).

From Table 42, it is obvious that Stuart's achievements in areas of the curriculum other than language arts and social studies were not very impressive. It should be made clear, however, that the subject specialists who taught Ms. Peters' class in the afternoon, did not keep as detailed class records as did Ms. Peters. Furthermore, in art, music, and physical education, there was no attempt by the teachers to arrive at any numerical score for each pupil. Scores for each of these subjects, therefore, were based upon each teacher's subjective perception of each pupil's effort and achievement in class. More detailed records were maintained in mathematics, science, and oral French, but were not readily available to the investigators in this study.

From the teachers' anecdotal comments (reproduced below), it seems clear that Stuart was regarded as at least a competent, cooperative student. But it is also possible that, because of the limitations of the teachers or the control problem experienced by the teachers in dealing with Ms. Peters' class, Stuart's potential (and, indeed, that of his classmates) was not realized. Concerning Stuart, the subject specialists commented:

> Stuart has been working hard in Math (January, 1976).
>
> Stuart has shown good improvement in Math (June, 1976).
>
> I'm pleased with Stuart's work in Science (January, 1976).
>
> Stuart continued to do well (in Science) (June, 1976).
>
> Stuart is able to use oral French effectively in the classroom (January, 1976).
>
> Stuart has participated effectively in French class (June, 1976).
>
> Good work, Stuart (in Physical Education) (January, 1976).
>
> Stuart enjoys Art class and participates effectively. He completes his work with much originality (June, 1976).

No anecdotal comments were made by the Music specialist, even though Stuart was a competent and, for his age, experienced musician.

It is helpful at this point to refer to certain of the factors contained in the attitude questionnaires administered to Stuart and his classmates. The attitudes of Ms. Peters' pupils toward selected aspects of self-esteem and perceived difficulty of schoolwork are presented in Table 43. From the MCI factor it appears that Ms. Peters' students did not regard their schoolwork as very difficult. (A low score on this factor indicates that the pupil does not perceive schoolwork to be difficult, and nine is the lowest possible score.)

An examination of the individual items in this factor again reveals that the nature of Stuart's responses varied depending upon the manner in which the item statements were phrased. When the statement obviously referred to the respondent's personal attitude, Stuart indicated that schoolwork was not difficult. But for item statements which asked for an opinion of other pupils' perceptions, Stuart quite realistically indicated that schoolwork was difficult for some.

| Instrument | Factor | | | Complete Instrument | |
|---|---|---|---|---|---|
| | Title | Stuart's score (max) | Class mean (S.D.) | Stuart's score (max) | Class mean (S.D.) |
| MCI | difficulty | 13 (27) | 13.32 (3.18) | 109 (135) | 96.32 (7.09) |
| SEI | general self-esteem | 46 (52) | 32.24 (7.84) | 86 (100) | 59.04 (15.29) |
| PCAS | academic self-image | 16 (18) | 11.52 (3.80) | 64 (84) | 52.17 (9.88) |

Table 43. Attitudes of Stuart and his classmates toward selected factors of self-esteem and perceived difficulty of schoolwork.

According to the SEI factor in Table 43, Stuart had the highest general self-esteem in his class, almost two standard deviations above the class mean score. Perhaps Stuart's one surprising response in this factor was "I'm proud of my schoolwork" -- "Unlike me." In several respects Stuart had considerable justification for being proud of his schoolwork, and it seems likely that Ms. Peters would have echoed the sentiment. That Stuart did not express pride may have been due to self-imposed high standards. Amongst other possibilities, one may speculate that Stuart was aware of and reacting to the slippage in his class academic ranking, in spite of Ms. Peters' continued high opinion of his achievements.

The matter of Stuart's pride in his academic achievements notwithstanding, according to the PCAS factor in Table 43 he had a very high academic self-image. Several classmates also attained very high scores on this factor but, not surprisingly, the remedial students achieved at a very low level.

Although it has not been possible to present hard evidence here, it appears that the considerable talents of Ms. Peters' class may have been squandered or otherwise abused during afternoon classes. Whether the reason for such wasted opportunity was due to willful pupil misbehaviour or lack of teacher skills is not at issue here, but the evidence seems to indicate that whereas the class achieved well in Ms. Peters' subjects, both by her standards and those of standardized tests, the pupils did not achieve as well in other subject areas.

The next section will present a closer examination of pupil classroom behaviours.

## Classroom coping behaviour

According to data collected during CASES observations, and summarized in Table 44, the predominant styles of behaviour of Stuart and his classmates were "attentive, adult-oriented and compliant" (Style 3), and "conforming, passive, and submissive to directions" (Style H) in TD settings. In NTD settings, Ms. Peters' pupils were generally "appropriately task-oriented, independent, and self-motivated" (Style G). (It should be noted that CASES data were obtained in Ms. Peters' classes only, and it should not be inferred that similar

| CASES coping styles | TD settings |  | NTD settings |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
|  | LA |  | LA |  | SS |  | Combined |  |
|  | score | vis% | score | vis% | score | vis% | score | vis% |
| A (aggressive, manipulative) | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| class $\overline{X}$ |  | 0.03 |  |  |  |  |  | 0.03 |
| S.D. |  | 0.07 |  |  |  |  |  | 0.08 |
| B (resistant, peer-oriented) | 5 | 0.19 | 0 | 0.0 | 11 | 0.27 | 11 | 0.20 |
| class $\overline{X}$ |  | 0.34 |  |  |  |  |  | 0.25 |
| S.D. |  | 0.31 |  |  |  |  |  | 0.17 |
| C (passive, dreamy) | 0 | 0.0 | 0 | 0.0 | 1 | 0.12 | 1 | 0.09 |
| class $\overline{X}$ |  | 0.31 |  |  |  |  |  | 0.19 |
| S.D. |  | 0.37 |  |  |  |  |  | 0.17 |
| D (distractible, peer-dependent) | 4 | 0.19 | 1 | 0.09 | 8 | 0.25 | 9 | 0.21 |
| class $\overline{X}$ |  | 0.18 |  |  |  |  |  | 0.27 |
| S.D. |  | 0.13 |  |  |  |  |  | 0.48 |
| E (attentive, adult-oriented) | 47 | 2.28 | 3 | 0.27 | 15 | 0.47 | 18 | 0.42 |
| class $\overline{X}$ |  | 1.81 |  |  |  |  |  | 0.31 |
| S.D. |  | 0.62 |  |  |  |  |  | 0.14 |
| F (assertive, task-oriented) | 0 | 0.0 | 0 | 0.0 | 26 | 0.81 | 26 | 0.60 |
| class $\overline{X}$ |  | 0.02 |  |  |  |  |  | 0.43 |
| S.D. |  | 0.04 |  |  |  |  |  | 0.41 |
| G (independent, on-task) | 17 | 0.47 | 51 | 2.60 | 97 | 1.72 | 148 | 1.95 |
| class $\overline{X}$ |  | 0.14 |  |  |  |  |  | 1.93 |
| S.D. |  | 0.13 |  |  |  |  |  | 0.27 |
| H (conforming, passive) | 30 | 0.97 | 1 | 0.06 | 3 | 0.06 | 4 | 0.06 |
| class $\overline{X}$ |  | 1.50 |  |  |  |  |  | 0.17 |
| S.D. |  | 0.39 |  |  |  |  |  | 0.15 |
| Overall CASES Coefficient |  | 6.19 |  | 7.79 |  | 7.49 |  | 7.57 |
| class $\overline{X}$ |  | 5.55 |  | 7.28 |  | 7.25 |  | 7.25 |
| S.D. |  | 0.45 |  | 0.62 |  | 0.61 |  | 0.49 |

Note: underlining indicates behaviour is visible ( > 1.00)

Table 44. Behavioural styles of Stuart and his classmates according to setting and subject matter (CASES C).

behaviours were to be found in the same proportions in lessons taught by other teachers.) A very few students also evinced "resistant, passive aggressive, delaying, and peer-oriented" (Style B) and "passive, withdrawn, avoidant, and dreamy" (Style C) behaviours in TD settings, and approximately one quarter of the class showed "assertive, socially integrative, and task-oriented" (Style F) behaviours in NTD settings.

The generally on-task, positive behaviour of the pupils in Ms. Peters' lessons was noted and variously commented on by the classroom observers:

> They (the pupils) seem very relaxed with the teacher, and they work when she directs them -- "pencils down, feet together, sit up straight" -- and they do (Anecdotal Notes C, 2).
>
> The students readily volunteer for this activity (reading compositions to class). They seem to enjoy it.
>
> Some interesting discussion (re: assigned seatwork). Children expressing views articulately.
>
> This activity (oral spelling competition) was enjoyed by the children. They participated actively and seemed disappointed when it ended.
>
> Interesting to note that, although there is a lot of personal interaction, children are well-behaved and very much under the control of the teacher.
>
> The class seems to be getting a little bit restless. She (Ms. Peters) speaks to them as a group, and they begin to settle down (Anecdotal Notes C, 1).

The overall behavioural climate during Ms. Peters' lessons was one of relaxed purposefulness, with some aberrant interludes which Ms. Peters brought under control, usually without undue loss of smoothness or momentum. The contrast between Ms. Peters' morning lessons, and the afternoon lessons conducted by subject specialist teachers was quite distinct, however. Although there are no CASES data by which to characterize the pupils' behaviours in the afternoons, there are notes from various classroom observers and pupil interviews which indicate the nature of the contrast. That the class was considered by the teachers in general, and by the grade six students themselves, as the most troublesome in the school has already been mentioned and discussed. Further evidence of the reason for this "afternoon reputation" was furnished by one of the classroom observers following interviews with two of Ms. Peters' students:

> One boy (Andrew) said I should see them (Ms. Peters' class) in the afternoon -- 'We're well behaved with Ms. Peters', but in the afternoon with their Science teacher they are more rambunctious. George sits in class and cracks jokes all afternoon. I interviewed a student today and asked him about Andrew's remark. He said that the Science/Math teacher doesn't care what they do, as long as they got their work done. And George does crack jokes all afternoon (Anecdotal Notes C, 1).

Ms. Peters also commented to one observer that it was difficult to manage her pupils because she treated them differently from the afternoon teachers. One result of the difference in the morning and afternoon behaviour of the pupils and the varied reaction of the teachers was that three boys were to be "disciplined" for what one afternoon teacher regarded as unacceptable behaviour. Against Ms. Peters' wishes, it had been decided at a staff meeting to arrange for the parents of the misbehaving boys to attend school for interviews with the principal in order to discuss the teacher's complaints. Ms. Peters recognized the fact that her pupils were capable of misbehaviour, and did in fact misbehave, but she also felt teachers should be knowing and competent in dealing with such problems (Anecdotal Notes C, 2).

Further evidence of the afternoon behaviour of Ms. Peters' pupils is provided by the Shadow Study observer:

> In the afternoon they started with an Art period. They are very casual working on the mural and the noise level is very high. They cannot all get to the mural, and about half of the students are just talking to each other and 'horsing' around with David's crutches, etc. ... She (the teacher) did not seem to have much impact on what the students were doing ... she said that she lets them work without much interference, as long as they get things done she doesn't try to control them very much... only about six or seven students worked seriously and for long periods of time on the mural. The noise level was high throughout the period (Shadow Study Summary C).

Other examples of off-task and generally inappropriate and deviant behaviour during the afternoon classes are contained in the narrative accounts of behaviour settings which form part of the Shadow Study Notes. It is not intended to provide further examples here, but it is interesting to note the proportions of Stuart's desirable and inappropriate behaviours in the course of the Shadow Study day. An examination of the specimen descriptions of Stuart's behaviour reveals that during Ms. Peters' lessons there were 42 examples of his desirable behaviours, compared with three examples of inappropriate behaviours. During the afternoon classes, however, there were 31 examples of his desirable behaviours, and 11 examples of inappropriate behaviours. For the majority of students, who were less well motivated than Stuart, it is reasonable to suspect that the proportions of their inappropriate behaviours would have been at least as great. Further evidence of Stuart's compliant and on-task behaviours is contained in Figure 16 (see p. 228) and Table 33 (see p. 252). From Table 33 it may be seen that, of 28 samples (excluding recess and lunch breaks) of Stuart's classroom locations during the Shadow Study day, he was appropriately sitting or standing to work at his desk on 23 occasions, and appropriately standing to work on the class mural on three occasions. On only two occasions was he recorded as moving to or from his desk.

A closer examination of Table 44 reveals that the Overall CASES Coefficient (OCC) for Ms. Peters' class was high in both language arts and social studies in NTD settings -- even so, Stuart's coefficients were higher than the class means. In TD settings, the class mean OCC was considerably lower, but Stuart's coefficient was proportionately higher. Stuart had a particularly high "attentive, adult-oriented, and compliant" (Style E) visibility in TD settings, and "appropriately task-oriented, independent, and self-motivated" (Style G) visibility in NTD settings. Although visibility was not reached, it is interesting to note that Stuart's undesirable behaviours (Styles A, B, C, and D) were generally less visible than the class means, whereas his desirable behaviours (Styles E, F, and G) were generally more visible than the class means. Stuart's comparatively low visibility for "conforming, passive, and submissive to directions" (Style H) behaviours could be explained because his behaviour was more often coded in the more desirable E and G Styles.

A more detailed examination of Stuart's behaviour is provided by Table 45. From Table 45 it is seen that, no matter the setting or subject, Stuart's behaviour was generally extremely visibly desirable, rarely visibly inappropriate, and never visibly unacceptable. This interpretation of Stuart's behaviour is supported by Ms. Peters' comments (some of which have been previously noted) and by the various investigative observers. Concerning Stuart, Ms. Peters said:

> He's always working, always wants to do right, always wants to learn things, and always wants to know things (Teacher Interview C, Part 2).

| Behaviour classification | TD settings | | NTD settings | | | | | | Both settings | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LA | | LA | | SS | | Combined | | LA | | SS | | Combined | |
| | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % |
| desirable[a] | 94 | 91.26 | 55 | 98.21 | 141 | 85.98 | 196 | 89.09 | 149 | 93.71 | 141 | 85.98 | 290 | 89.78 |
| inappropriate[b] | 9 | 8.74 | 1 | 1.79 | 22 | 13.41 | 23 | 10.45 | 10 | 6.29 | 22 | 13.41 | 32 | 9.91 |
| unacceptable[c] | | | | | 1 | 0.61 | 1 | 0.45 | | | 1 | 0.61 | 1 | 0.31 |
| total | 103 | | 56 | | 164 | | 220 | | 159 | | 164 | | 323 | |

[a] visible at 80%

[b] visible at 10 - 15%

[c] visible at 3%

Table 45. Classification of Stuart's behaviour according to subject and setting (CASES C).

Later in the interview, while explaining why she felt Stuart and two other bright students would do so well, Ms. Peters noted:

> The desire. They want to do well. They've got that extra little something that really makes a difference.

Following a language arts lesson, Ms. Peters was interviewed for the Teacher Sort Task. She chose Stuart first in a group of six pupils who, during the lesson:

> Had done really well. All those six people really made an effort to try and come up with something a little bit different. I think these children are competitive too ... they were really trying to please me ... their product was really good, and they put the maximum effort into their work (Teacher Sort Task C, Part 2).

Although Ms. Peters saw Stuart as an interested, enthusiastic, industrious and talented student, she also noted that he was moderate in his emotions and quite self-controlled. She was interviewed following a creative writing lesson in which she had used the actual making and eating of popcorn in the classroom as the stimulus for the pupils' compositions. She noted that several students were "quite excited", but Stuart was one of a group of seven boys who:

> Were interested, but they weren't carried away. They all wrote well ... they were just average (in terms of their emotional involvement), but they're always like that. They were enjoying themselves -- they were full of smiles. They've learned to contain themselves and keep it all underneath (Teacher Sort Task C, Part 3).

Perhaps the most convincing evidence of the generally high quality of Stuart's classroom coping behaviours is contained in the Shadow Study Notes. The day of the Shadow Study began in a pleasantly warm room that became hotter, and more stuffy and uncomfortable as the day wore on, until a classroom temperature of 28°C was reached. The air-conditioner in the room malfunctioned, and either circulated warm air or no air at all. The single window in the room could not be opened, and there was no ready access to fresh air which, in any case, would still have been very warm. Many pupils exhibited off-task behaviours in the course of the day, and for much of the day the pupils were in NTD settings and were responsible for keeping their own behaviours on-task. In this situation, with all these possible handicaps and distractions, Stuart remained remarkably consistently on-task and productive. In his specimen descriptions, the Shadow Study observer repeatedly characterized Stuart's behaviour in the following ways:

8:55 a.m. Seems engrossed in it (preparing his social studies studies project).

9:05 a.m. .... enjoys working, gives help, is quite sociable and a good student.

9:35 a.m. Stuart intently working on drawing -- face shows extreme concentration.

10:15 a.m. Stuart writing very carefully on the cover of (his project) book -- not paying any attention to idle questions (from classmates).

2:30 p.m. (temperature 27°C) (Stuart is) a hard worker -- sticks with it (completing Math. worksheets) (Shadow Study Notes C).

Table 46 contains a comparison of Stuart's behaviours on the Shadow Study day with his behaviour as recorded by the CASES observation data. Bearing in mind the exigencies of the Shadow Study settings, there is high consistency in Stuart's behaviour. According to Spaulding's (1974) threshold visibility levels, and extrapolating from the evidence and data provided above, it seems safe to categorize Stuart as a competent, industrious, purposeful, and cooperative student. Furthermore, it does not seem unreasonable to suggest that this description of Stuart held true for most of the school year.

| Behaviour classification | Threshold visibility % | CASES data % | Shadow Study % |
|---|---|---|---|
| desirable | 80 | 89.78 | 83.76 |
| inappropriate | 10 - 15 | 9.91 | 16.09 |
| unacceptable | 3 | 0.31 | 0.0 |

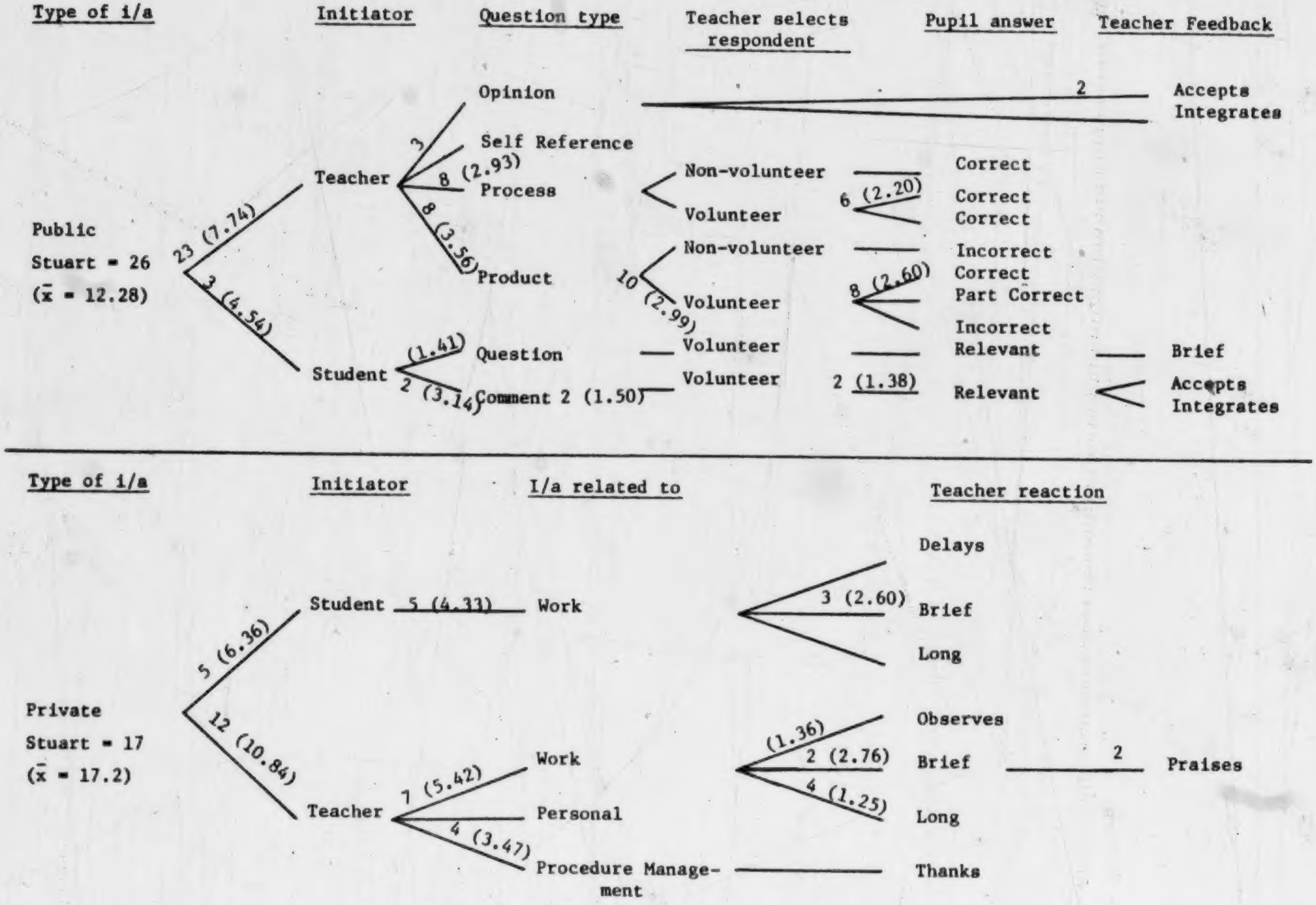
Table 46. Classification of Stuart's behaviour according to actual CASES data, and a CASES analysis of the Shadow Study specimen record data.

In view of his high ability level and his high academic self-esteem, it is not surprising to find that Stuart volunteered to answer many of Ms. Peters' classroom questions and was, in fact, frequently chosen by her to respond (DICOS C). From Figure 20 it is seen that in the 10 language arts lessons observed, almost 60 percent of the classroom dyadic interactions involving Ms. Peters were private, and that two-thirds of these interactions were initiated by Ms. Peters. Stuart's involvement in these private interactions was quite typical for his class.

In teacher initiated public interactions, however, Stuart was a respondent three times more frequently than the class mean. The majority of public dyadic interactions between Ms. Peters and Stuart were a result of Stuart volunteering the answer and being selected by Ms. Peters. His answers were almost always correct, or relevant to the topic at hand, and accepted or integrated into discussion by Ms. Peters.

Most of the dyadic teacher-pupil interactions in Ms. Peters' classes were work-related, it is not surprising, therefore, to find that high achievers dominated these interactions. This information contrasts with Ms. Peters' perception that she devoted much of her time with her small group of low ability students.

The next section will present a discussion of the apparently salient factors in Stuart's school experiences and his life as a school pupil.


Type of i/a
Initiator
Question type
Teacher selects respondent
Pupil answer
Teacher Feedback
Public
Stuart = 26
($\bar{x}$ = 12.28)
23 (7.74)
3 (4.54)
Teacher
Student
3
8 (2.93)
8 (3.56)
(1.41)
2 (3.14)
Opinion
Self Reference
Process
Product
Question
Comment 2 (1.50)
Non-volunteer
Volunteer
Non-volunteer
10 (2.99)
Volunteer
Volunteer
Volunteer
6 (2.20)
8 (2.60)
2 (1.38)
Correct
Correct
Correct
Incorrect
Correct
Part Correct
Incorrect
Relevant
Relevant
2
Accepts
Integrates
Brief
Accepts
Integrates
Type of i/a
Initiator
I/a related to
Teacher reaction
Private
Stuart = 17
($\bar{x}$ = 17.2)
5 (6.36)
12 (10.84)
Student
5 (4.33)
Work
Teacher
7 (5.42)
4 (3.47)
Work
Personal
Procedure Management
3 (2.60)
Delays
Brief
Long
(1.36)
2 (2.76)
4 (1.25)
Observes
Brief
Long
Thanks
2
Praises

Note: Links with no figure showing represent N = 1. Class mean < 1.00 not shown.

Figure 20. Nature of the public (class N = 307) and private (class N = 430) interactions between Stuart and Ms. Peters in 10 language arts lessons (DICOS C).

## Discussion

The discussion presented here will focus on salient points contained in the previous sections and which seem to have special significance for Stuart's life as a school pupil. Where appropriate, cause and effect relationships among the factors brought into discussion will be suggested. Finally, evaluative comments will be made concerning the formal education experienced by Stuart.

In many respects Stuart was a fortunate child. He appeared to enjoy a full and happy home-life, and to have supportive and thoughtful parents who cared for his welfare in a broad sense. His parents were successful in terms of socio-economic status, and they valued both formal education and wider cultural experiences. Although they encouraged Stuart in his scholastic and musical achievements, they appeared to do so without exerting undue pressure on Stuart or causing him to become unduly anxious.

Stuart, in fact, had very high measures of general and academic self-esteem. He was an intelligent, independent, hardworking, conscientious, and successful child who was "a pleasure to have in class" (Ms. Peters -- School Progress Report). He had extremely positive attitudes towards his class and his teacher (Ms. Peters), and somewhat less positive attitudes towards learning activities and school in general.

Although he was not an obviously popular boy, Stuart was described as "sociable" by the Shadow Study observer. Stuart's friends and classroom associates included both high and low achievers, although his chosen workmates and playmates were three of the most industrious and most academically successful boys in the class. Stuart was friendly and helpful but, even though he was the youngest pupil in the class, he seemed to possess the maturity to interact socially on his own terms. It was this strength of character, allied to a strong motivation to achieve, that probably accounted for Stuart's extremely positive classroom behaviours.

In language arts TD settings, Stuart was extremely attentive and adult-oriented. In language arts and social studies NTD settings he was highly independent and on-task (CASES C). The CASES data, of course, apply only to Ms. Peters' lessons, nevertheless, Stuart appears to have maintained these desirable behaviours even during lessons taught by other teachers, when the classroom coping behaviours of many of his classmates deteriorated so badly.

The classroom routines and teaching strategies employed by Ms. Peters seemed to be very appropriate for Stuart's style of learning. He enjoyed the many public dyadic interaction opportunities Ms. Peters afforded him, and was most often successful in these interactions (Figure 20). He also enjoyed the project work activities which Ms. Peters assigned to her class. Furthermore, he probably particularly appreciated Ms. Peters' lessons since he preferred a quiet environment, and the lessons with other teachers were seldom quiet.

In September, 1975 Stuart had completed the MAT, achieving class ranks of first, fourth, and fifth on various measures of skill in language arts (Table 38). His success on the MAT, allied to his exemplary manner and behaviour as a student, probably helped in the shaping of Ms. Peters' extremely positive perceptions of Stuart. In return, sensing Ms. Peters' esteem for himself, and enjoying Ms. Peters as a teacher may have helped to promote the very positive attitudes

Stuart had towards his class and teacher, and to encourage his academic achievements. This posited cycle of cause and effect is the positive counterpart of Braun's (1976) "vicious cycle."

In the course of the current year, however, Ms. Peters had noticed a weakening in Stuart's academic achievements. She discovered that Stuart was spending much of his out-of-school time with his musical interests and with activities to earn pocketmoney. A conversation with Stuart's parents apparently remedied the situation. Nevertheless, at the end of the current school year, Stuart's results on the writing of a second form of the MAT indicated that his academic achievements throughout the year had not kept pace with those of his classmates (Table 39). His class rankings on various items of language arts skills ranged from fourth to fourteenth, showing a drop from first place to fourteenth place in reading.

Prior to the administration of the second MAT, Ms. Peters had indicated that she considered Stuart to be the top student in her class in terms of her perception of his success in language arts, social studies, and overall (Table 40). In view of the subsequent results of the MAT, Ms. Peters perception seems to have been erroneous. However, her perceptions of Stuart received support from his scores on the CLT, also administered at the end of the current school year (Table 37). According to the CLT results, Stuart was ranked first in his class on the verbal DIQ, fifth on the nonverbal DIQ, and first overall.

It is interesting to note that Stuart was accorded maximum marks for effort and achievement in language arts and social studies on the final entries in the School Progress Report. It appears, therefore, that Ms. Peters' criteria for academic success were quite dissimilar from those implicit in the MAT. On the other hand, it appears that Ms. Peters' perceptions of Stuart's academic success were more closely associated with his academic attributes as measured by the CLT than were his results on the MAT.

What is not clear is whether Ms. Peters' rankings of Stuart's academic achievements were a result of some insightful understanding of his attributes, or in reaction to the very positive attitudes she had toward Stuart, based initially on his performance on the first MAT results. In either event, it is clear that Stuart as student and Ms. Peters as teacher were well suited to each other. There must be some concern, however, regarding the placement of the remedial pupils in Ms. Peters' class. And there must be dismay over the manner in which lessons were conducted by Ms. Peters' colleagues with her class in the afternoon sessions. It seems that Stuart and his classmates may have suffered from much wasted opportunity.

## The School: Napier Elementary

The design and furnishings of the Napier school building represented a different philosophy from that which had guided the building of Jamieson school. The original Napier school had opened in 1964, but it had been added on to in 1967 and again in 1969, although the additions retained the style and character of the original building. The school was two storeys high, built of dark brick and masonry. High, narrow hallways, lined with brick and tile walls and granite-chip stone floor, helped give a somewhat cold and austere appearance to the school, which occasional dashes of pale orange and light buff colours did little to relieve.

The school was set on over three acres of land in a residential area of single dwelling houses, built mainly in the late 1940's and 1950's. To the north-west, the school was fronted by a shallow, looped drive-way that provided parking space for teachers' automobiles and joined on to a tree-lined road. To the north-east, an adjacent side of the school grounds was bounded by another roadway. To the south-east and south-west of the school, a grassed playing field stretched to the garden fences of neighbourhood houses. The field was equipped with a softball backstop, two soccer goals, a sand-filled long jump pit and, tucked away in a corner of the field near the school, such playground equipment as teeter-totters, a jungle gym, a slide, and a low horizontal bar. Three sides of the building were skirted by a strip of asphalt. The area in front of the school was grassed with a few bushes and a flag pole, but the general appearance was unremarkable and somewhat unkempt.

The school (Figure 21) itself contained 17 classrooms, library, gymnasium, music room, remedial reading room, infirmary, study room, staff room, staff work area, school office, and various other offices and storage areas. The layout and furnishings of the more recently constructed parts of the school were more pleasant and more brightly decorated than those in the original building. Although the original building had been planned to permit comparatively simple and easy communications around the hub of the general office, the later additions had resulted in a somewhat confused and lopsided distribution of classrooms. The whole school generally lacked the "openness" which characterized Jamieson school, although this does not imply that there was an atmosphere of unhappiness or oppression.

The Napier teaching staff comprised male principal and vice-principal, and four male and 14 female teachers. Included among the teachers were a librarian, and music and physical education specialists. The half-time services of a school counsellor and the services of the school district guidance supervisor were available to the school. Also, referral services were available for children with physical and emotional health problems. The school was served by two female secretaries and a male janitor. At the time of this investigation there were two female student teachers undergoing practicum experience at the school. The pupil population consisted of 459 children distributed among seventeen classes ranging from grades one through seven.

Napier school was organized on the basis of a six-day, 35-minute timetable. Each grade one class had a separate timetable, however, and an abbreviated school day. Teachers of grades one, two, and three

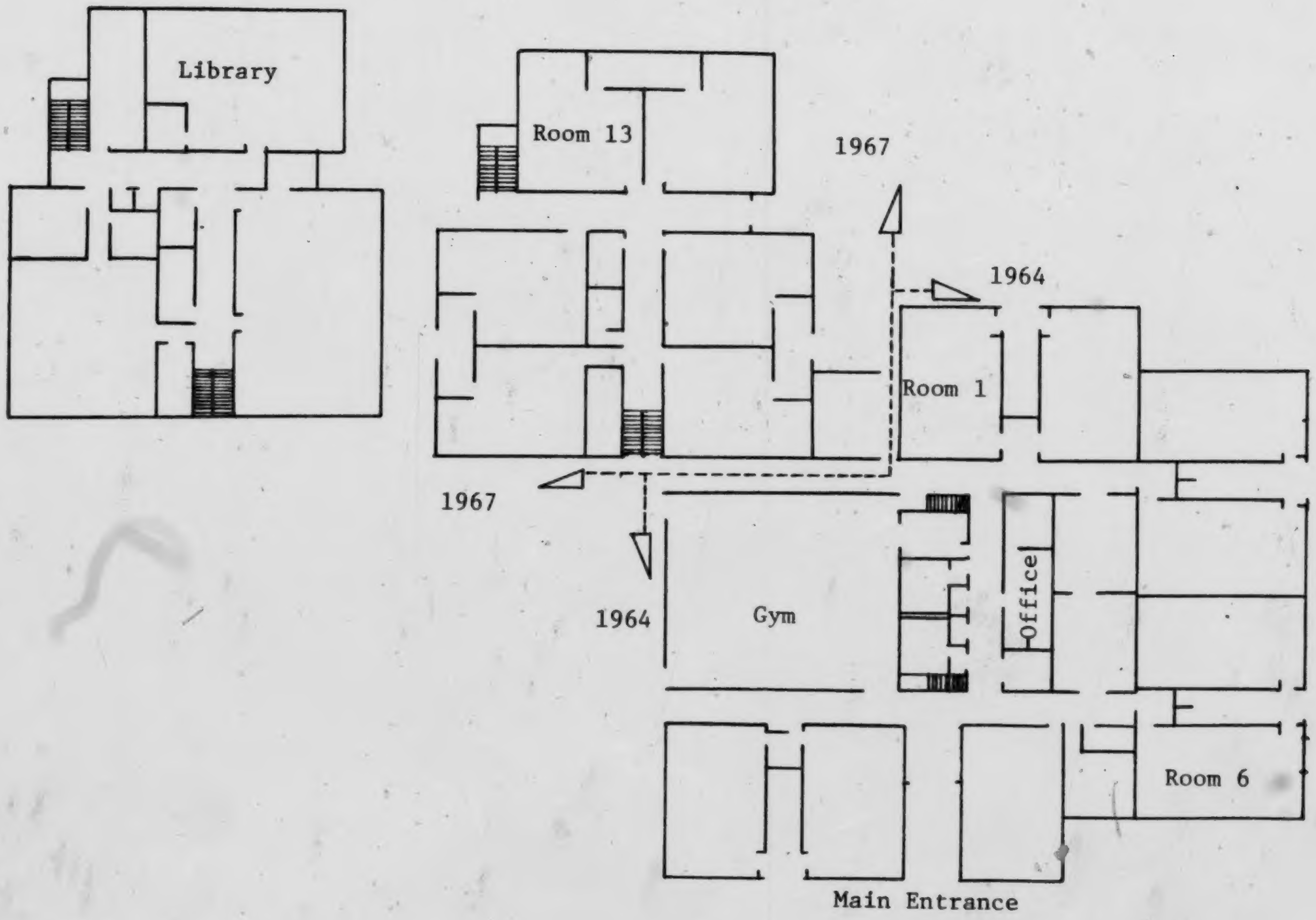

Library
Room 13
1967
1964
Room 1
1967
1964
Gym
Office
Room 6
Main Entrance

Figure 21

Napier Elementary School Floor Plan

classes were primarily responsible for organizing and teaching their own classes, although a specialist relieved the homeroom teacher for music lessons, and a librarian was available during lessons held in the library. Teachers of grades four, five, and six classes were responsible for all "core" subjects, but were relieved by specialists for art, music, and physical education.

For the purposes of various competitions and sporting events, the 459 pupils at Napier were organized into four "houses" or clubs. Also, there was a students' union for grades four, five, and six pupils. Grade four pupils took part in Junior Red Cross classes.

Although not designated a "community school", the school actually had some definite links with the public. The first link was through a parent-teacher association. Secondly, the school provided the facilities (through a joint-use agreement) for various organizations and activities such as Brownies, Cubs, Beavers, Guides, a church group, and a volleyball club. Finally, the community assisted the school through parent aides (assigned to kindergarten, the library, and other classroom services); through a parent volunteer group for outdoor education projects; and through use of the community swimming pool (used for a grade two beginning swimming program). At a staff meeting attended by one of the investigators, the principal noted the interaction between community and school and expressed the opinion that, although Napier had not been designated a community school, it was moving in that direction.

The staff at Napier school was quite a heterogeneous mix of teachers of all ages and quite different personalities and characteristics. At a staff meeting held early in the investigation, it was noted that matters were conducted along semi-formal lines, with much evident pleasantness and goodwill. The observing investigator recorded that:

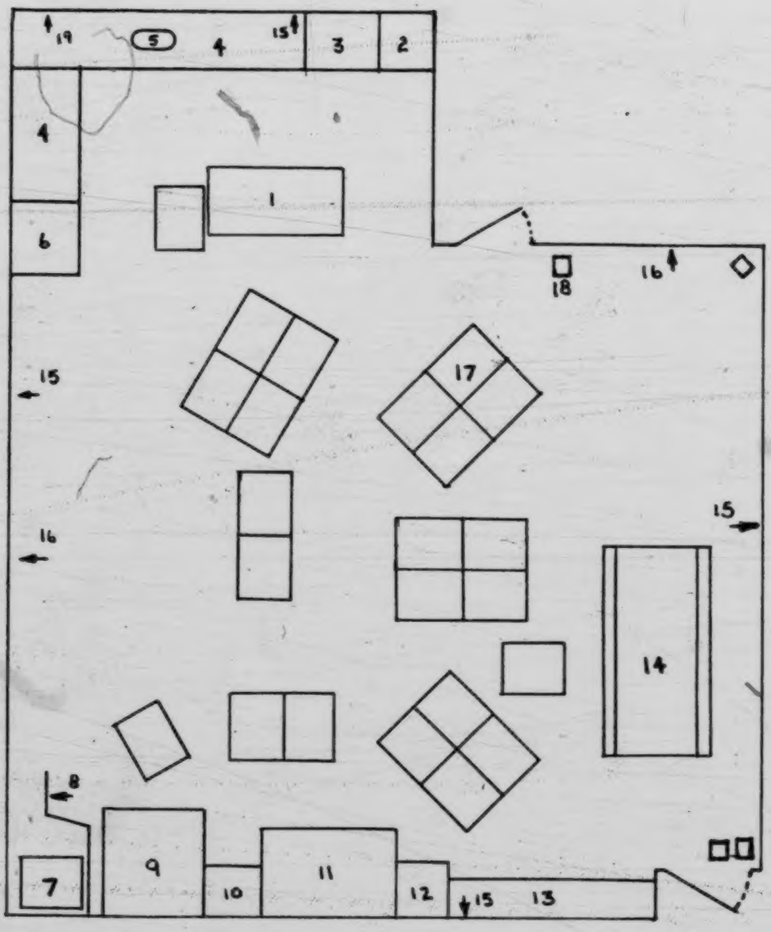
> Tone was good -- pleasant, lighthearted, with good participation from all but two or three of the 22 present. (Vacant) positions on various committees were quickly filled -- ready response from many to be on organizing committees. Good, positive staff relationships. (Anecdotal Notes D, 1)

During the period of this investigation, however, a dispute arose between the administrators and some teachers which resulted in rather strained relationships and noticeable tension amongst the teachers. It was not clear whether this tension affected school events in any significant way. The general impression gained by the observers while at Napier school was that the teachers were dedicated and competent but were older, more "self-contained," and more set in their ways than teachers at Jamieson school. (Two young, first-year teachers were notable exceptions to this generalized observation).

## The grade one classroom: Room 13

Room 13 (Figure 22) was located in the eastern corner of the ground floor of the 1967 addition to Napier school (see Figure 21, p. 307). It was a bright room with white ceiling, off-white walls, and dark purple-and-brown wall-to-wall carpet. The room was made interesting and cheerful, however, by displays and materials organized and added by the teacher.

The displays and room decorations included pupil and teacher preparations as well as commercial productions. A mural labelled "Spring is here" dominated one wall. This mural had been prepared by


19
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KEY

1. Teacher's Desk
2. Closet
3. Supplies Shelves
4. Counter Top
5. Sink
6. Table
7. "Time out" Desk
8. Plywood Divider
9. Puppet Theatre
10. Chart Table
11. Games and Activities
12. "Fun Papers" Table
13. Sets of Books
14. Table and Benches
15. Bulletin Boards
16. Chalkboards
17. Pupil Desks
18. Chairs
19. Window

Figure 22

Environmental Details of Room 13, Napier School

the teacher and her pupils, and depicted large flowers, each representing a different sound and linked with the names of the pupils. Other pupil-prepared decorations included mobiles, worksheets, letters of the alphabet, stories, and numbers. Teacher-prepared materials included a "money" chart; the months of the year; alphabet cards; word lists; pupil activities and achievement charts; a vocabulary list; and construction-paper turtles of various colours. Commercially prepared decorations included calendars; posters of animals, the five senses, and Spring; the Canadian flag; and cards illustrating shapes, numbers, time, and alphabet, and growth measurements. Vases of flowers and pussy willows also decorated the room. None of the charts was constructed to compare pupil achievements or illustrate their class rank in any learning activity.

Several additions and changes were made in Room 13 throughout the period of this investigation. Wall displays of pupil-authored stories were changed a number of times, kitemobiles were added, a new monthly calendar appeared, paper footprint shapes (to popularize a class story) were fixed to the floor, and the floral decorations were changed. As one observer noted, "All four walls (were) covered (with) an amazing amount of material" (Environmental Inventory D, 2).

The major room furnishings included 24 pupil desks; a teacher's desk; a large work-table with two bench-seats; seven small chairs; a puppet theatre; and various shelves and counter-tops. All these items were generally arranged as shown in Figure 22. Instructional equipment included four bulletin boards, two chalkboards, a screen, and a record player. There were sets of readers and English and mathematics workbooks, and supplies of construction paper, worksheets, scrap paper, foolscap, drawing paper, and assorted readers. Finally, there were several learning games and activities, including a word "fish-pond," a darts game (for arithmetic), and jigsaw puzzle-type games.

Room 13 had only one window, which opened onto the field at the rear of the school. Fluorescent light supplied even lighting sufficient for all classrrom purposes. Ambient conditions were generally pleasant, although on days during this investigation when the external temperature was very high, the classroom temperature sometimes reached 25°C.

Classroom observers were aware of few auditory distractions in Room 13. Inside the room, acoustic tiles, classroom furnishings, and the carpet all helped deaden sound. The faint hum of the air exchanger, at first noticeable, soon became an insignificant background noise. External noises seldom penetrated the room.

The teacher made varied use of the classroom space. The children had generally free access to the whole room, but a pupil desk partly hidden by a wooden screen in one corner of the room, was used as a means of temporarily isolating students whose behaviour was undesirable. Other parts of the room were used specifically, but not exclusively, as various game and activity centres.

## The grade one teacher: Ms. Ingle

### Introduction

Ms. Wendy Ingle had been born, received her schooling, and attended a teacher education institution in an East African country, where her parents owned and operated a small store. She had also taught primary grades for three years in a small town elementary school before emigrating to Canada and settling in Alberta. Since her arrival in Alberta, Ms. Ingle had earned her B.Ed. degree and had taught for a further eight years -- all at the elementary school level. At the time of this investigation, Ms. Ingle was in her mid-thirties, married, and with two children of her own.

Ms. Ingle was dark and petite, with a very pleasant, quiet manner. She impressed the classroom observers with her friendly, supportive, trusting, and accepting manner. One observer noted that:

> Children are able to approach the teacher easily and with the assurance that they will be given a sympathetic hearing. The absence of behaviour checks (and) criticism of children's behaviour is the remarkable thing about this classroom (Anecdotal Notes D, 1).

A second observer (Anecdotal Notes D, 2) recorded the notable lack of aggressive and boisterous behaviour amongst Ms. Ingle's pupils, and associated this with Ms. Ingle's quiet interactions with her students and her concern for them (as evidenced by such acts as drying the children's hair when they came to school one rainy morning).

This subjective assessment of Ms. Ingle is supported by more objective measures. Her score on the MTAI, for example, was at the 88th percentile, indicating that Ms. Ingle was extremely positive in her interpersonal relationships with pupils. A more detailed analysis of Ms. Ingle's personality was provided by administration of the 16 PF questionnaire. According to the results of this instrument, Ms. Ingle was "extremely humble, trusting, and shrewed." Also, she was "very sober, tender-minded, and conservative."

That her pupils generally responded very favourably towards Ms. Ingle is evidenced by the results of various attitude tests administered to the class. According to the MCI factor in Table 47, most children were very satisfied with being in Ms. Ingle's class. An examination of the individual items in the factor shows that all class members believed that the whole class enjoyed their school and schoolwork, and that most pupils were pleased with the class. Nineteen of 21 pupils believed the class to be "fun" and perceived their classmates to hold the same attitude. The findings of the MCI are strongly supported by the results of the OSAT student-instruction interaction factor (Table 47). Of a possible maximum score of 84, the class mean score for this factor was 77. According to individual items, 20 of 21 pupils were "happy" or "neutral" toward Ms. Ingle -- only one child chose a negative response. Children made similar responses when asked how does your teacher feel when "she talks to you," and when "she talks to you about the lesson." The responses were less positive to questions asking how Ms. Ingle felt when "you ask her for something in class," and when "you ask her to help you." Finally, on the SEI instrument to be reported on later in this chapter, 18 of 21 agreed that "My teacher makes me feel I'm O.K."

Further insight into Ms. Ingle's personality is provided by her responses on the TIBT. According to the TIBT, Ms. Ingle had a basic belief orientation in System 1, with traces of System 4 (see Appendix G). According to Harvey (1974), the responses of System 1 people show:

> Adherence to norms and practices approved by society or prestige authorities, a negative reaction to rule-breaking, and polarized evaluations. Heavy reliance on authority is demonstrated by highly favourable attitudes toward religion, law, parents, friends. Other people must meet rigid standards of acceptability, operating in terms of the general behavioural principles of the subject.

The apparent hardness of some aspects of this description is softened by Ms. Ingle's secondary set of characteristics, identified as System 4 on the TIBT. A System 4 person shows:

> Complexity of thought and feeling. Depth of connotative implications rather than superficial statement is most typical of these subjects. They tend to show novelty and appropriateness and to synthesize the many differentiations they make.

| Instrument | Factor | | | Complete instrument | |
|---|---|---|---|---|---|
| | Title | Clive's score (max) | Class mean (SD) | Clive's score (max) | Class mean (SD) |
| MCI | satisfaction with the class | 25 (27) | 23.57 (1.65) | 103 (135) | 100.33 (7.26) |
| OSAT | student-instruction interaction | 47 (84) | 77.00 (7.76) | 70[a] (116) | 99.43 (9.38) |

[a] scores between 29 and 74 = negative response to school (Rivera, 1973)

Table 47. Attitudes held by Ms. Ingle's pupils, including Clive, toward selected class and instruction factors.

Ms. Ingle revealed a very low level of cynicism on the TIBT. It seems likely that this characteristic, combined with her beliefs concerning people in general, enabled her to develop a classroom atmosphere in which children generally felt comfortable, secure, and happy. Ms. Ingle's stated beliefs concerning people seemed to form the basis for her classroom procedures and interactions:

> People should be honest, friendly, and respect each other in spite of their differences. At the same time people should be individuals, not to follow somebody 'cause he is strong etc. -- have their own opinions, but respect others, too.

Some of the sentiments expressed in these comments also flow into her beliefs concerning "friendship," "back talk from students," and her "power to control the important things" in her life. In all of her statements on these issues there are the threads of mutual respect and sharing, give and take, and critically searching for best resolutions. Ms. Ingle repeatedly confirmed her belief in the importance of the individual, but also stressed the social context.

In her role as teacher, Ms. Ingle gave expression to her beliefs by always being prepared to accept and discuss with both children and parents. She was, furthermore, very concerned for the social development of her pupils, and showed a great deal of knowledge about the home backgrounds as well as the classroom interactions of her pupils. When asked, for example, whose child she would be least prepared to talk about should a parent drop in unannounced, she replied, "Nobody's" (Teacher Interview D, Part 2). Even though pressed by the interviewer, Ms. Ingle felt unable to single out one child whom she could not discuss with confidence and equanimity. Similarly, evidence of her natural tendency to accept people was provided when Ms. Ingle was asked to name one child whom she would rather see go if she was told by her principal to reduce her class. Again, Ms. Ingle was unable to offer a name, but said that she would simply tell the principal to remove the last name on the class roll if the reduction was unavoidable.

When asked about her class, Ms. Ingle considered the pupils were typical of grade one classes both academically and socially. She noted, however, that following discussions with the special education teacher, it was apparent that her class had more problem students than other grade one classes at Napier school, even though children had been randomly assigned to classes upon entry into grade one.

When asked what were her most important duties as a teacher, Ms. Ingle replied that it was to "guide" her pupils. By way of amplification, she defined guiding as recognizing and meeting the needs of each child as an individual. She also linked home life to school life as in the following example:

> Guiding is also -- like they come from home and most of the time they are with us. Lots of things that happen at home they don't get a chance to tell so they come and tell us and we listen to them and sort of talk with them and see something we could do about it and help them think out --- so not only teaching, but listening to them and really being perceptive to what they are saying (Teacher Interview D, Part 1).

The next sections of this chapter will examine Ms. Ingle's goals, curriculum content, and classroom methods and policites in an attempt to explicate these in light of her personality and stated beliefs.

## Goals

During one of the several interviews conducted with Ms. Ingle, she referred to her earlier statement that it was a teacher's duty to "guide" her students. She explained that guiding was more than teaching, for:

> Each child has his own needs -- there are so many open-ended answers that we have. If I expect everybody to write the same answer -- that's not the way it should be. Each child -- I guide him differently the way he wants to go (Teacher Interview D, Part 1).

Ms. Ingle expanded on this statement, and her goals for her pupils as inferred from interviews conducted with her, have been summarized as follows:

Academic goals

- to extend the pupils knowledge
- to improve the pupils' abilities to speak, read, write, listen, and describe visual experiences

Social goals

- to be capable of working independently
- to work cooperatively with other pupils
- to be independent
- to be able to live with peers
- to achieve self-understanding and to understand others

Although Ms. Ingle did not specifically mention emotional goals, her comments also showed a concern for the emotional stability and development of her pupils. Ms. Ingle considered both academic and social goals to be of importance, but she also believed that the socially mature child would eventually improve academically and, for this reason, was in a dilemma concerning three of her low achievers. The three children in question were not performing sufficiently well academically for promotion to grade two, but in other ways they were sufficiently mature and Ms. Ingle felt tempted to recommend their promotion in the expectation that their academic learning would be accelerated. In addition to these three low achievers, there were two other children who were more suited to the kindergarten program (which was in fact where Ms. Ingle sent them for part of each day). In view of the unpromising performance of these five children, it seemed contradictory for Ms. Ingle to agree that her pupils were achieving her goals to her satisfaction. An explanation for Ms. Ingle's satisfaction may be found in her concern for individuals and in recognizing the uniqueness of each child's personality, needs, and potential. Thus, although these children were not performing as well as others in the class, their achievements were accepted because they were achieving to the level of their present ability.

It is interesting and important to recognize the strength of Ms. Ingle's convictions and interests as a teacher. This investigation took place towards the end of Ms. Ingle's first year of teaching at Napier school. She made it known that she had asked to be transferred from another school in the Westham district to Napier school because it would give her the opportunity to teach language via the language experience approach:

> I was teaching "Nelson" in the other school for the last four years and I was sort of getting ... tired of it, and I had heard a lot about language experience and I wanted to try it and there was an opening here (Teacher Interview D, Part 1).

She noted that by using the "Gage" language experience approach and the Duso Kit for social studies, she was able to have the children focus on themselves -- how they felt, how they thought, and what they thought. She stressed the use of the Duso Kit in order for her pupils to develop understanding of themselves as well as other people.

Curriculum Content and Organization

When asked if she wanted to change her program or any part of it, Ms. Ingle noted that:

> Thinking of the program that I'm doing -- actually I wanted it. That's why I came here and I'm doing it, and I'm very happy with the program (Teacher Interview D, Part 2).

A summary of Ms. Ingle's curriculum content and timetable organization was compiled following discussions with her and observation of her teaching and is presented below:

Subjects

- language arts (Gates language experience program)
- social studies (Duso Kit)
- mathematics (Addison-Wesley program)
- science (Department of Education text and various "science exploration" kits)
- arts and crafts (very flexible -- generally integrated with language arts and other subjects)
- music (taught by specialist -- one period per week)
- physical education

Timetable example (six-day cycle)

| A.M. | | | P.M. | | |
|---|---|---|---|---|---|
| 8:40 | opening exercises<br>language arts | or Music | 12:35 | math | |
| 9:50 | RECESS | | 1:10 | p.e. or library or science | or |
| 10:05 | language arts | | 1:40 | social studies or health | Art |
| 11:15 | LUNCH | | 2:10 | SCHOOL OUT | |

In spite of the references above to various standard resources, it should be made clear that Ms. Ingle also relied on her years of experience and other aids in order to supplement and enrich her program:

> Like, we are doing a unit about the R.C.M.P. In the unit -- it was just suggested that you talk about the R.C.M.P., but I go up to the library, bring back the books and pictures and stuff, and now we are going to have a trip (Teacher Interview D, Part 1)

Ms. Ingle set great store by the language experience program. She noted its integrated nature, its focus on the individual and that, in addition to reading and writing, it required the children to develop and use listening, phonics, and interpretation skills. She mentioned that the program needed little extra material adding to it since it was sufficient in itself and, in fact, perhaps attempted too much. But, further to this latter point, she also recognized that as she gained more experience with the program, she would eliminate repetitious material. When asked if there were any changes she would like to make to her total curriculum, she answered:

> General changes? No. I think our timetable is very flexible. There's no black and white things waiting for you. You try to put in everything and do your job. I'm kind of satisfied with what I'm doing. (Teacher Interview D, Part 2).

Instructional Methods and Policies

The basic class organizational structure used by Ms. Ingle is summed up in her statement that:

> I talk to the whole class in the beginning when we do the introductory activities and I want to tell the whole class something. Then I definitely break them up into groups. Then after they are in groups, if I feel that somebody really needs extra help, then I take one person at a time (Teacher Interview D, Part 1).

The class was usually divided into three groups based on the abilities to achieve and to work independently. These three groups were named Bluebirds (the "top group"), Robins, and Sparrows. The Sparrows were divided into a fourth group for some purposes. (Two low achieving girls actually spent much of their time with the kindergarten class in order to make up knowledge and skills not yet learned.) The Bluebirds comprised 10 children, the Robins seven, and the Sparrows five. The Sparrows group all had learning problems and usually spent a part of each morning with the school's learning disabilities specialist. The groups were sufficiently flexible to allow for pupils to be changed according to their progress.

A summary of Ms. Ingle's instructional methods and classroom policies was compiled following discussions with her and observation of her teaching and is presented below:

Methods

- teacher interacts with the whole class, groups, and individuals
- topics are discussed, listened to, written about, and read (usually in that order)
- activity centres established on a semi-permanent basis
- task cards (commerically prepared)
- learning games (derived from in-class topics)
- commercially prepared learning kits (in science and social studies)
- workbooks and worksheets (commercially and teacher prepared)
- use of library (two scheduled visits per week by pupils)
- Show and Tell, and Read and Tell
- use of audio-visual aids -- listening centre, overhead projector, flannel board, filmstrip projector
- use of grade six aides
- field trips
- class booklets, displays of pupil work

Policies

- free movement about the room
- use of desks, table, floor and counter-tops as workplaces
- conversation allowed if not deleterious
- cooperative work encouraged
- seating arranged in social groups (and changed frequently to increase range of friendship)
- classroom procedures generally arrived at in discussion with pupils early in the year
- use of songs and body-part identification activities as interludes (also to gain attention or control)
- pupils clean up floor space
- pupils report to own desks upon entry to school
- pupils line up at door for dismissal from room
- fighting and "tattling" not allowed
- to cope with deviant behaviours:
    - teacher cautions and explains to student why a behaviour is unwanted
    - teacher may call out deviant pupil's name use of "time-out" centre to isolate a misbehaving pupil
    - pupils may be sent to principal for fighting

The general atmosphere in Room 13 was one of purposeful and pleasant busy-ness. Much of the activity was generated and maintained by the pupils with little teacher intervention. As one observer noted:

> Teacher seems cool, calm, and collected.... Much self-directed pupil activity -- busily engaged in activities, little need for teacher supervision -- children were goal, lesson, and classwork oriented (Anecdotal Notes D, 1).

As a corollary to these observations, it was also recorded that there were few disruptive pupil behaviours and almost no behaviour checks by the teacher. What seemed to impress the classroom observers most was Ms. Ingle's apparent assumption that the children's activity and conversation would be productive and on-task. As one observer noted:

> It's like a self-fulfilling prophecy. (The) teacher expects that (the) children will be work-oriented AND THEY ARE. She rarely checks anyone, nor does she need to....The absence of behaviour checks -- criticism of children's behaviour -- is the remarkable thing about this classroom. And yet the work is being done. There is no need for teacher intervention (Anecdotal Notes D, 1).

There is little doubt that the children had generally a high regard and affection for Ms. Ingle. It was noted that the children were able to approach her "easily and with assurance that they will be given a sympathetic hearing" (Anecdotal Notes D, 1). And Ms. Ingle, in the formal interviews conducted with her, showed a great deal of empathy for the children. The children's attitude towards Ms. Ingle was exemplified by one of her pupils who brought his mother and grandmother to an evening open house at the school just so that they could "sit near me (Ms. Ingle), and sort of talk to me, and not to go away" (Teacher Interview D, Part 2).

In addition to the children's positive attitudes towards Ms. Ingle, the observers were impressed with the variety of materials, displays, and activities in Room 13. During one classrrom observation period, an observer recorded:

> There is a variety of things going on at any one time, for example,
>
> - three children "fishing" for words (a vocabulary learning game based on class discussions) at an activity centre
> - two children at the "seeds" table (planting seeds in order to grow flowers for mothers)
> - two children at the workbench
> - teacher working with one child
> - all others (12 children) working independently at their seats

That such diverse events took place in Room 13 is supported by Table 48. This table is derived from the Shadow Study data obtained from a full day's observation of classroom events. The table supports the statements by Ms. Ingle and the classroom observers concerning the differentiated grouping, activities, and location of pupils. It should be noted that the class was gathered together as one group on very few occasions, and that Ms. Ingle rarely occupied a central location or took a position at her own desk (see Figure 23). A more detailed discussion of Ms. Ingle's classroom methods and policies, and their relationship to her curriculum plans and instructional goals, will be presented in the next section.

## Discussion

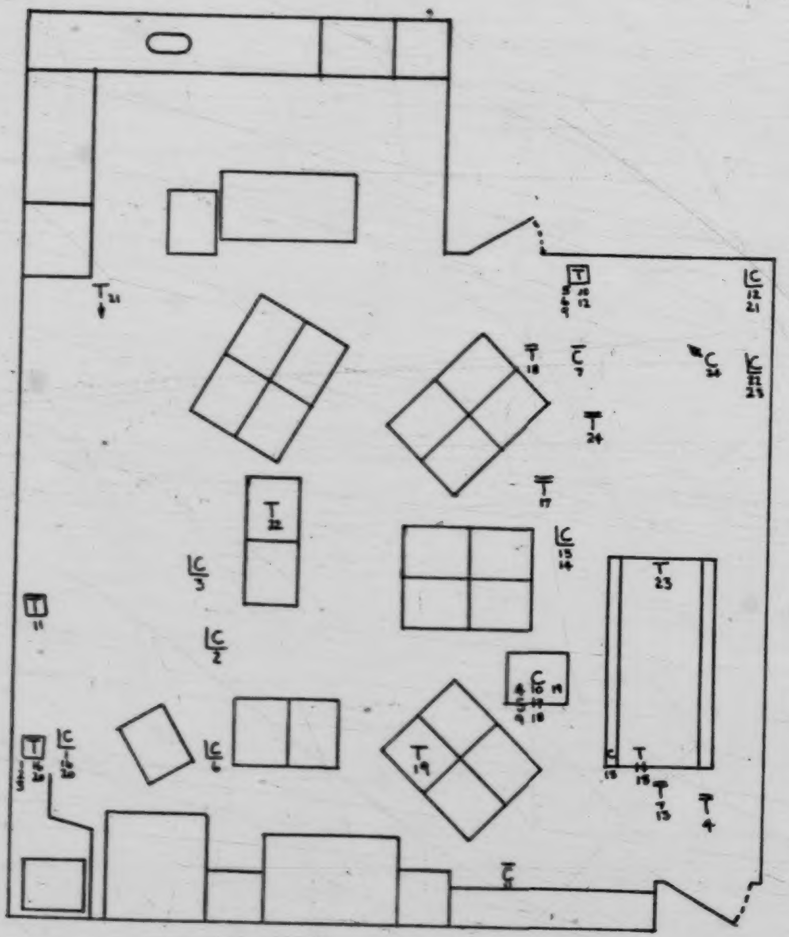
Whether by design or happy chance, Ms. Ingle seemed to have achieved a remarkable synthesis of her goal statements, curriculum plans, and teaching strategies. For example, her expectation that pupils would remain on-task with little supervision and little fuss was generally matched by the children's competencies to perform the tasks required of them. Also, the children's competencies were challenged and stimulated

| Time samples in order | Locations of pupils (N = 21) | | | | | Locations of teacher | Notes |
|---|---|---|---|---|---|---|---|
| | in own desks | moving to/ from desks | at large table | standing to work | standing about/ sitting on floor | | |
| 1 | 1 | | | 1 | $19^a$ (in group) | seated with group | Show and Tell |
| 2 | | | | | $21^a$ (in group) | seated with group | Show and Tell |
| 3 | | | | | $21^a$ (in group) | seated with group | T explains next activity |
| 4 | $17^a$ | 4 | $3^b$ | | | standing near table | |
| 5 | $13^a$ | 2 | $3^b$ | | 6 (in group) | seated with group | T checks worksheets |
| 6 | 9 | 2 | $4^b$ | 1 | $7_a$(in group/ $1^a$ | seated with group | |
| 7 | 3 | 6 | 7 | 1 | $7^a$ (in line at door) | standing at table | Ps line up for recess |
| 8 | RECESS — ALL PUPILS OUTSIDE | | | | | | |
| 9 | $9^a$ | 4 | | 1 | 7 (in group) | seated with group | |
| 10 | $9^a$ | 1 | | 1 | 7 (in group) | seated with group | 3 Ps out of room |
| 11 | 5 | | | $2^a$ | $8_a$(in group; 3 | seated with group | 3 Ps out of room |
| 12 | 3 | 4 | 1 | | $10^a$ (in group) | seated with group | 3 Ps out of room |
| 13 | 5 | 4 | | 2 | $7^a$ | standing at table | 3 Ps out of room |
| 14 | 7 | $2^a$ | 1 | 2 | 6 | seated at table | 3 Ps out of room |
| 15 | 5 | 3 | $1^a$ | 1 | $8_a$ | seated at table | 3 Ps out of room |
| 16 | | | | | $20^a$ (in group) | seated with group | RETURN FROM LUNCH |
| 17 | $18^a$ | | | 2 | | standing with P | |
| 18 | $18^a$ | | | 2 | | standing with 2 Ps | |
| 19 | $12^a$ | 1 | | | 7 | seated at P desk | 5 Ps lined up for T help |
| 20 | | 1 | | | $19^a$ (in group) | seated with group | |
| 21 | | 2 | | | $18^a$ | walking across room | Ps dispersed or in pairs |
| 22 | | 1 | | | $19^a$ | seated at Ps desk | |
| 23 | | 3 | | 2 | $15^a$ | seated on table | |
| 24 | 1 | $4^a$ | 1 | 2 | 12 | standing | |
| 25 | DISMISSAL | | | | | | |

[a] location of Clive

[b] three pupils from another grade one class joined Ms. Ingle's class temporarily

Table 48. Locations of pupils and Ms. Ingle in Room 13 as sampled every tenth minute throughout one day (Shadow Study Notes D).



KEY

T = Ms. Ingle
C = Clive
C̄ = Standing
←C = Walking
⊡ = In Desk
⌊C = Sitting on Floor
Subscripts = Locations in order of sampling.

Figure 23

Map of Ms. Ingle's and Clive's classroom locations plotted every tenth minute throughout one day. (Shadow Study Notes D) by the classroom activities either required of them (e.g., worksheets) or available to them as options (e.g., learning games). It was the mutually supportive nature of Ms. Ingle's goals, curriculum, and methods which had so impressed the classroom observers and lead them to attribute the highly desirable pupil behaviours to Ms. Ingle.

That pupil classroom behaviours, attitudes towards Ms. Ingle and the learning situation, attitudes towards peers, and self-concept were all highly positive is made apparent by the results obtained on the instruments used in this investigation (see Appendix A). Furthermore, the results achieved by the children on the MAT (June, 1976) showed that academic goals had not been sacrificed for social goals. Possibly the reason for Ms. Ingle's success as a teacher lay in her philosophical approach to teaching, as revealed in her classroom behaviours and her comments and statements made in the course of the interviews conducted with her throughout this investigation.

Typical of the comments which best encapsulated Ms. Ingle's concern for her role as a teacher are:

> - Everything a teacher does is a guide to children;
> - It's not only one thing I have to do or a teacher has to do. I feel that more so than teach, I think I should guide them, and I'm trying as much as I can. (Teacher Interview D, Part 1)

For Ms. Ingle, "guiding" meant setting examples of the ways in which it is acceptable to behave, thus:

> I don't like to stand in front of the children and lecture and say ' I'm right and you are wrong.' If I make a mistake, I will be honest and tell them that I made a boo-boo. And, if they do something (wrong), they say so -- and that tells me that the way I'm being honest with them, they are telling me that they have done something wrong (Teacher Interview D, Part 1).

That Ms. Ingle's manner had the desired general effect on her pupils was supported by the observations of the investigators. One classroom observer made the following comments over a period of several days:

> - Before school, class is very relaxed. Teacher walks around and talks with them. Some pupils come in wet--teacher sends them to change into cut-offs and dries their hair....Pupils talk softly, look at plants, etc. No aggressive behaviour at all. Dean is the only one who even has raised his voice in one week (of observation).
> - As the teacher works with the language arts group, it's amazing how she handles the continuous intrusions plus works with the group .... During this time ... the people at their desks were absolutely superb in the way they worked on their own.
> - Dean and Clive: "She's pleased with mine!" "She's pleased with mine, too!" Her approval is very important to them. (Anecdotal Notes D, 2)

Ms. Ingle's ability to deal with intrusions without losing control of the situation (what Kounin, 1970, has called "withitness" and "overlapping") enabled her to cater more effectively to the affective needs of children. As another classroom observer noted, "The teacher's ability to handle many simulataneously occurring events was very much in evidence," which presumably made it possible for the children "to approach the teacher easily and with the assurance that they will be given a sympathetic hearing" (Anecdotal Notes, D, 1). There were isolated instances of undesirable pupil behaviour that Ms. Ingle had to deal with, as noted by one classroom observer:

> During this period the class was unsettled. Those who had been assigned a written expression task ... were not work-oriented at all. Teacher was showing signs of annoyance at this. (She) left the group she was working with and spoke to the rest sternly. This caused a change in the behaviour of the children. The teacher's control techniques were positive and effective. Teacher spoke about the disturbing effect of

> their behaviour on her work with another group (Anecdotal Notes D, 1).

Thus, even an unwanted and annoying incident was taken and used positively by Ms. Ingle to promote her basic goals, as well as to improve her classroom control. Another feature of Ms. Ingle's teaching which impressed the classroom observers was the effectiveness of her lesson planning. On one occasion, an observer noted:

> (The) teacher today seemed very well organized. (The) amount of planning (though not on paper) is impressive.... This morning I was very impressed with the teacher's preparation: it was thorough (Anecdotal Notes D, 1).

This observation is supported by the high inference data (see Appendix F) which indicate that Ms. Ingle had very well developed classroom management skills.

Ms. Ingle's planning did not often involve special audio-visual equipment or even pre-lesson prepared chalkboard notes. But she seemed to prepare herself more in the manner of a resource person for her pupils, and her organizational and management skills accounted for the smoothness with which classroom activiites took place.

Yet another impressive feature of Ms. Ingle's teaching was the number of child- and teacher-initiated contacts made in the course of the regular teaching day (also, see p. 366). As one observer noted:

> The number of contacts ... during this period was PROLIFIC -- teacher checking work of pupils, pupils asking teacher about spelling of words, procedure matters, etc. There were also a lot of teacher-afforded contacts (procedural-management behaviour warnings). (Anecdotal Notes D, 1).

Two aspects of the contacts between pupils and teacher were particularly noticeable. First, reinforcing the impression of Ms. Ingle as being friendly, supportive, and accepting, it was recorded that "Some children received considerable praise for their writing efforts -- NO adverse comments were made at all" and, on another occasion, "Their (the pupils) initiations are listened to politely, accepted, approved ...." (Anecdotal Notes D, 1). Second, the pupils' comments were often incorporated into the lesson, or used to form the basis for further learning activities. It was noted, however, that Ms. Ingle seldom probed the children's understanding by extended questioning. One classroom observer commented that "(The) teacher does not use the ideas, questions, comments, etc. of (the) children, ... rarely if ever probed, developed, extended etc." and, on another occasion "(The) teacher's reactions ... were brief, very pleasant, but little probing followed." If probing and extending pupils' responses is related to more effective pupil learning, than it is possible that Ms. Ingle's supportive and empathic manner with the corresponding positive affective response of her pupils was at the expense of some pupil academic achievement (although there are no data in this study which further amplify this possibility).

Perhaps the one characteristic which most strongly influenced Ms. Ingle's behaviour as a teacher was her attitude of "caring" for her pupils. Evidence of caring has already been given, and further evidence is supplied in the high inference data (see Appendix F) which indicate a high degree of warmth, although a lower level of empathy in Ms. Ingle's teaching. But comments made by Ms. Ingle at various times give some indication of the strength of this attitude, perhaps best encapsulated in the statement that "You do everything possible that you can do for the kids" (Teacher Interview D, Part 1). During the interview wherein she was asked to select pupils according to Silberman's (1969) criteria, Ms. Ingle chose one boy to whom she would like to give all her attention because "I think I can help him academically plus socially, ... the love he has lacked I can give him" (Teacher Interview D, Part 2 -- emphasis added). On another occasion, while offering to explain the reasons for her actions during a lesson, Ms. Ingle commented "You (meaning herself) know the kids, they are part of you. You know why you do some things, but you don't think it's of importance to mention." (Stimualted Recall Interview D, 1 -- emphasis added). One example of the reasoning behind Ms. Ingle's actions concerned Glen, whom she picked to answer a question because "he doesn't get much of a chance to speak at home, and he does have a few things that he would like to say" (Stimulated Recall Inteview D, 1). And yet, while she catered to the perceived needs of individuals, Ms. Ingle maintained a functional awareness of the class as a whole. Thus, she called upon Glen to speak, even though she knew he was habitually long-winded and often obtuse, but she did not interrupt or correct him because:

> "If I do, he will get so disturbed he will go all the way around and then go back to the first thing he said and explain the whole thing over again. That would just disinterest the (other) kids. (Stimulated Recall Interview D, 1 -- emphasis added).

Perhaps one of the classroom observers (who was a parent of school-age children, and an elementary school principal) best summed up the effects of Ms. Ingle's teaching when, following the Shadow Study he had conducted in Room 13 he commented that:

> The atmosphere he (the target pupil) worked in was positive--it required independent, responsible behaviour on the part of the pupils. They carried this out with few reminders by the teacher ... the pupils were

consistently on-task with very little deviance.

> As a parent, I would have been very pleased to see my child put in the subject's (target pupil's) kind of day. As a principal, I would be happy to have such pupil-teacher days in my school (Shadow Study Summary D).

## The grade one pupil: Clive Foster

### Influence of the home and attitude toward school

Clive Foster was born in Westham and had lived there all his life. At the time of this investigation, he was aged seven years four months and was one of the oldest children in the class. He was of average height for his age, of well-knit build, and had an open, pleasant face. With curly brown hair, fresh complexion, and ready smile, he was a likeable young boy. Clive was healthy, active, and seldom unwell or absent from school. Before entering grade one, he had spent one year in kindergarten.

Clive was the youngest in a family of three children, with a brother and a sister. All the family lived at home, with Mr. Foster employed as a tool salesman (Blishen score of 52.68), and Mrs. Foster employed as a school aide (Blishen score of 32.17) in an elementary school in the Westham district. The Fosters gave "Protestant" as their religious affiliation.

Both Mr. and Mrs. Foster had completed high school graduation, and Mrs. Foster had continued her education, completing one year of university. In the matter of schoolwork, Clive's parents considered that he was doing "About the same as most other children the same age," and that he would continue his formal education to high school graduation

(PATES). When asked to comment on their expectations for Clive's future, Mr. and Mrs. Foster said "We would like Clive to obtain a university degree or papers in some trade based on the ability and desires he shows up to completion of grade twelve" (PATES).

Mr. and Mrs. Foster had generally very positive attitudes towards many aspects of public school education. These attitudes appeared to be based partly on their own positive experiences. They "strongly agreed," for example, that "Going to school is a profitable experience," that their own years in school "were well spent" and helped them develop interests which still provided enjoyment (PATES). Also, their positive attitudes seemed to be related to the benefits which they perceived generally derived from education and accrued to their children. They again "strongly agreed," for example, that "the public money which is put into schools today is well worth it," that "On the whole schools are doing a good job today," and that "The best way to get a good job is to get a good education" (PATES). They were critical of some aspects of school since they "strongly agreed" that "Schools should spend more time than they do teaching boys and girls how to be useful citizens," and they "agreed" that "Some boys and girls are always getting tough breaks in school," that "Most schools don't let the parents know enough about what's going on," nor is sufficient attention paid to teaching reading, to giving explanations, and to making pupils behave themselves as well as they should (PATES). In spite of these reservations, the Fosters' attitudes toward education as measured by the PATES ranked second highest of all the parents of children in Ms. Ingle's class.

Clive's own attitudes towards school and school-related matters were quite mixed. From the MCI and OSAT factors in Table 47 (see p. 315) it is seen that, although he appeared very satisfied with his class (even more so than his classmates), Clive experienced considerable difficulty with schoolwork (much more than his classmates). There is wide disparity between Clive and his classmates on the OSAT factor student-instruction interaction and, in fact, Clive's response to the school environment as measured by the OSAT ranks lowest, as well as being classified as the only negative response, in the class. A closer examination of Clive's response to individual items on the OSAT shows that he perceived his teachers, including Ms. Ingle, as having negative attitudes towards him. On the other hand, he indicated that the teachers felt well disposed toward his classmates. In answer to several questions relating to the teacher interacting directly with him, Clive usually chose the "neutral or serious" response. Towards the end of the OSAT qeustions, Clive's responses again became extremely negative. To such questions as "How do your teachers feel when you cannot answer the questions?" "How do your teachers feel when they hear you answer the question?", and "How do your teachers feel when you don't come to school?", Clive gave the extreme negative response. Because of the apparent contrast in Clive's responses in Table 47, one must test the sincerity of his answers by looking elsewhere for corroborative or clarifying evidence.

From Table 49, it is evident that Clive scored high on the general school attitude factor (OSAT). This is again in contrast to his scores on other OSAT factors and to his total score for the instrument. Explanation for this may be found partly in the small number of items (six) which comprise the factor, and in the nature of the questions. Clive's responses indicate that he felt "happy" in school and upon seeing the school building, and his feelings were "neutral" towards everybody and everything in school. His most negative attitudes appeared to be directed specifically toward his teacher, Ms. Ingle, and his classmates, and these items will be discussed more fully in the next section.

| Instrument | Factor | | | Complete Instrument | |
|---|---|---|---|---|---|
| | Title | Clive's score (max) | Class mean (SD) | Clive's score (max) | Class mean ( SD) |
| SEI | general self-esteem | 34 (52) | 39.14 (7.65) | 62 (100) | 75.43 (12.73) |
| | home self-esteem (parents) | 8 (16) | 12.19 (2.95) | | |
| | school self-esteem (academic) | 12 (16) | 12.67 (2.78) | | |
| OSAT | general school attitude | 18 (20) | 18.29 (1.39) | 70[a] (116) | 99.43 (9.38) |

[a] scores between 29 and 74 = negative response to school (Rivera, 1973)

Table 49. Attitudes of Clive and his classmates toward selected self, home, and school factors.

The SEI factors reported in Table 49 seem to confirm that Clive enjoyed quite a high self-esteem in the academic setting, an attitude which matched his general liking for school as measured by the OSAT. The attraction of school may also have been partly a response to negative attitudes toward home, as indicated by the SEI home self-esteem factor, which was based upon Clive's interactions with his parents. An examination of the individual items comprising this factor supports the view that Clive felt unwanted at home, rather than uncared for or unloved. Certainly the home self-esteem Clive experienced was lower than almost all of his classmates even though he claimed that he and his parents "have a lot of fun together" and that they understood him and usually considered his feelings in making decisions affecting him.

Clive's general self-esteem (SEI) was also lower than that of most of his classmates, although his low score for this measure may be partly due to the apparent indecision in his responses (he frequently checked more than one response for each item). His most significant responses on this factor were "I'm pretty happy" and "I understand myself" while acknowledging that "It's pretty tough to be me," "Things usually bother me," and "I can't be depended on."

Clive's generally positive attitude toward school was confirmed in the pupil interview conducted with him following the Shadow Study. During the interview, Clive mentioned that he "played school" at the home of one of his friends from his class, indicating that school was associated with enjoyable experiences (Pupil Interview D). This inference was further supported by Clive's assertion that he would like to attend school even if not compelled to do so:

> Because if I never came then I wouldn't learn how to read different words.... I wouldn't be able to write stories or have art. I wouldn't be able to have fun (Pupil Interview D).

Clive, with a measured I.Q. 15 points higher than the class mean, was a member of the top ability group in the class and did not experience great difficulty with his work. This enabled him to play with the classroom quiet games which he admitted to "liking." The "fun" to which he referred, however, was perhaps related to games played with his classmates before school and at recess. The Shadow Study observer noted that Clive had had "almost no instances when he looked sad" in the course of the Shadow Study day. When he asked "Do you think that most of your school days are happy ones or sad ones?" Clive replied, "Mostly happy," and agreed that the day of the Shadow Study was no different from any other day (Pupil Interview D).

Clive seems to have been blessed with an empathic teacher, parents who valued education, good health, a liking for school, and above-average intelligence. Yet, for Clive, school was not the consistently positive experience it seemed likely to be. The next sections present a more detailed analysis of Clive, his classmates, Ms. Ingle, and their classroom interactions.

## The social setting

At the time of this investigation, Clive's class comprised 11 boys and 10 girls (one class member had moved from Westham during the first few days of this investigation). Almost all the children had been born in Alberta — many in Westham itself. Judged by socio-economic status, the children came from quite homogeneous backgrounds. Most fathers were senior skilled tradesmen or lower- and middle-management administrators (class mean of 41.35 on the Blishen scale). Most mothers were homemakers, although some worked either parttime or fulltime.

Concerning her class, Ms. Ingle considered that:

> Socially, I would say the whole class has really, really developed a lot. They've really grown a lot....The ones that were not that outgoing before are speaking up and feeling comfortable (Teacher Interview D, Part 1).

Two classroom observers generally agreed that the social climate of Room 13 was relaxed, pleasant, supportive, and friendly (Anecdotal Notes D, 1 and 2). And following the Shadow Study day, the observer noted that, as a parent and as a principal, he would have been very pleased with the social atmosphere and the conduct of events in Ms. Ingle's room (Shadow Study Summary D).

From Tables 47 and 49 (see p. 315 and p. 335), it was seen that Ms. Ingle's class had generally positive attitudes toward school (OSAT) and toward the class as a whole. Table 50 summarizes the attitudes of Clive and his classmates toward selected factors related more specifically to intra-class social relationships. From Table 50 it is seen that most children had highly positive views concerning interpersonal relationships in Room 13 (OSAT). Their attitudes were also quite positive concerning their self-esteem within the social context of their peers (SEI), and the degree of group cohesiveness within their class (MCI). On the other hand, the children were quite aware of friction and competitiveness in their class (MCI).

According to individual items on the MCI, all or almost all pupils agreed that children liked their class and thought of their classmates as friends -- even as "best friends." But approximately half of the pupils also agreed that classmates were always fighting with each other. That fighting did take place (or at least, had taken place earlier in the year) was evidenced by Ms. Ingle's rules for dealing with the problem, by her reference to incidents of fighting during one of her interviews, and by her class records which indicated that three boys had been sent to the principal to be disciplined for fighting. It seems quite possible that, for grade one boys, fighting is not a traumatic experience and that, even if some fighting takes place, the overall experience of school and dealings with classmates can be happy. Certainly there was overwhelming support for the statement that "School is fun" (MCI).

From Table 50 it is seen that Clive's attitudes concerning friction, competitiveness, and cohesiveness as measured by the MCI were very close to the average for the class. Such is not the case on two other factors. First, Clive appeared to have poor attitudes towards interpersonal relationships within the class (OSAT). For two questions, "How are you with your friends?" and "How are your classmates with you?", Clive chose the most negative ("angry") of four response options. His response was more positive ("neutral") to the question "How is everybody with you in school?" Second, his social self-esteem amongst his classmates (SEI) was also quite poor and the third lowest in the class. Although Clive felt he was "easy to like," "a lot of fun to be with," and usually had other children follow his ideas, he nevertheless felt that "most people ... (were) better liked" than he, that he would rather play with younger children, and that other children "picked on" him very often. He was ambivalent concerning whether he was liked by his age peers. The considerably negative attitudes realized by the OSAT and SEI instruments and reported on above are difficult to reconcile with some of Clive's more positive responses reported on elsewhere. The negative attitudes related to peers are particularly difficult to interpret when the information presented below is considered.

| Instrument | Factor | | | Complete Instrument | |
|---|---|---|---|---|---|
| | Title | Clive's score (max) | Class mean (S.D.) | Clive's score (max) | Mean score (S.D.) |
| OSAT | interpersonal relationships | 5 (12) | 10.14 (1.86) | 70[a] (116) | 99.43 (9.38) |
| MCI | friction | 19 (27) | 19.19 (4.04) | 103 (135) | 100.33 (7.26) |
| SEI | social self-esteem (peers) | | | | |

[a] scores between 29 and 74 = negative response to school (Rivera, 1973)

Table 50. Attitudes of Clive and his classmates toward selected factors related to the social setting of Room 13.

Ms. Ingle's pupils were asked to select three classmates for each of the questions "Who would you like to sit near?", "Who would you like to work with?", and "Who would you like to play with?" The first choices for each of these measures are shown in Figure 24. From this sociogram, it is evident that most children in Room 13 were generally well regarded by their peers. Only three children, all boys, did not receive first preference choices on any of the measures. Each of five boys received four or more choices, whereas choices were more evenly spread amongst the girls. It is interesting to note that seven boys and five girls selected the opposite sex, particularly as first choice for "like to play with".

In view of Clive's apparent low social self-esteem and his negative comments (reported on above) concerning his friends, it is most surprising to note from Figure 24 that he received a total of more first choices on all three sociometric measures than any of his classmates. Young children's friendships are often short-lived relationships, and the sociogram may represent only a fleeting picture of the social organization of Ms. Ingle's pupils, but Table 51 presents a more complete picture of Clive's social contacts and confirms the impression that he was a popular boy amongst his peers. In addition to the sociometric measures already mentioned, Table 51 summarizes Clive's social preferences, and Clive's contacts as recorded via the Shadow Study and the Pupil Interview. From Table 51, it is seen that a total of 13 children gave Clive as one of their three preferences on the three verbally presented tests. This number was further augmented by children who, although they did not select Clive during the verbal test, were

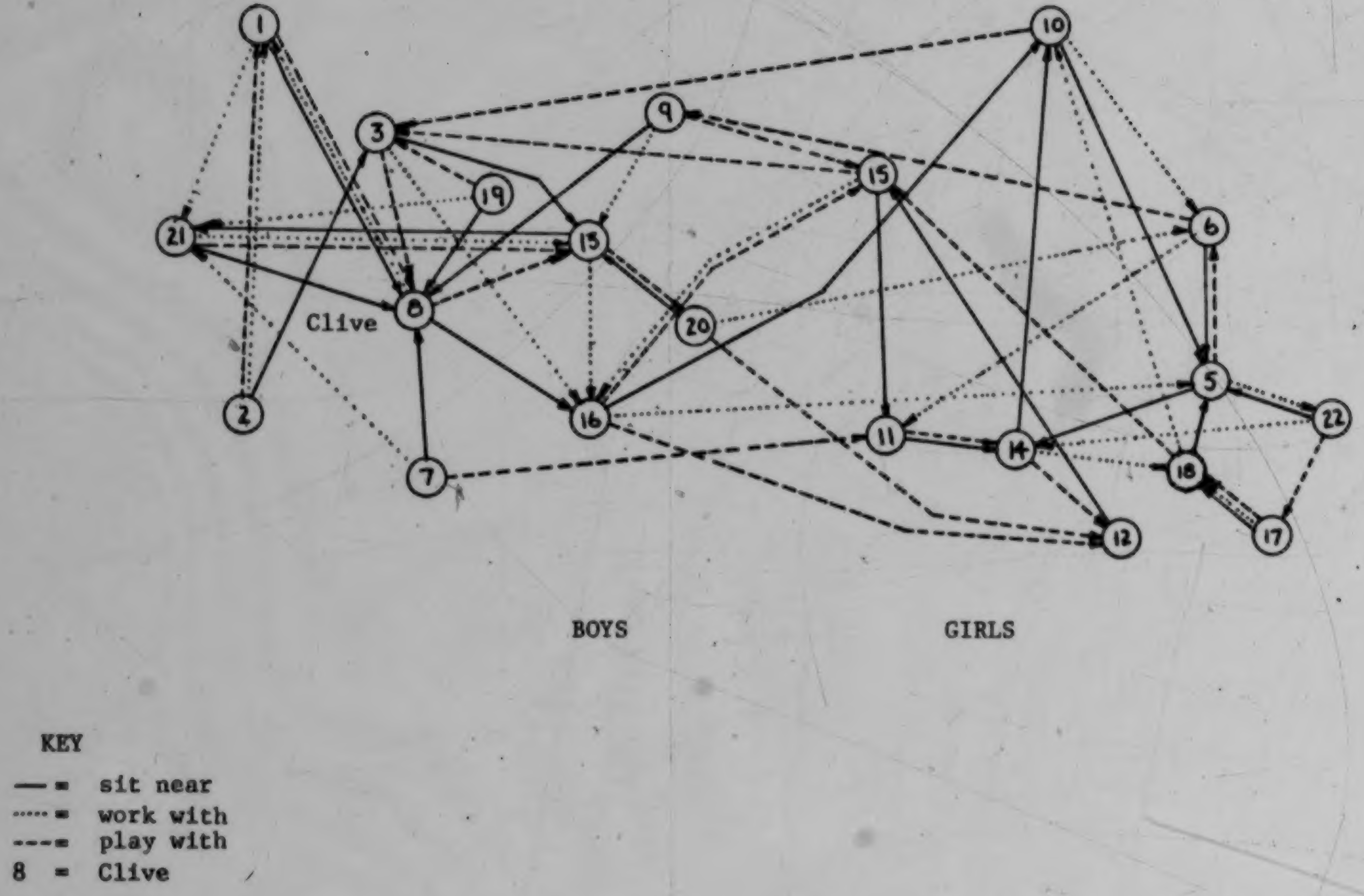

1
3
9
10
15
19
21
13
6
8
Clive
20
2
16
11
5
22
14
18
7
12
17
BOYS
GIRLS
KEY
— = sit near
····· = work with
- - - = play with
8 = Clive

Figure 24

Sociogram of Ms. Ingle's
Grade One Class based on first choices of three Measures.

| Information source | | | Classmates idenfified by ID number and sex | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 M | 2 M | 3 M | 6 F | 7 M | 9 M | 10 F | 11 F | 12 F | 13 M | 14 F | 15 F | 16 M | 19 M | 20 M | 22 F | 21 M |
| 1. sit near | | | | | | | | | | | | | | | | | | | |
| | a | verbal test | | | | | 2nd | | | | | | | | 1st | | 3rd | | |
| | | pupil interview | | 2nd | | | | | | | | | | | | | | 1st | 3rd |
| | | Shadow Study | | 1 | | | 1 | | | 1 | | 1 | | | 1 | | | | |
| | b | verbal test | 1st | | | | 1st | 1st | | | | 2nd | | 3rd | 3rd | 1st | 3rd | | 1st |
| | | Shadow Study | 1 | | | | | | | | | | | | | | | | |
| 2. work with | | | | | | | | | | | | | | | | | | | |
| | a | verbal test | 1st | 2nd | 3rd | | | | | | | | | | | | | | |
| | | pupil interview | | | | | | | | | | 2nd | | | | | | 1st | 3rd |
| | | Shadow Study | 2 | 1 | | | | | 3 | 3 | | | 1 | | | | | | 2 |
| | b | verbal test | | 2nd | | | | | | | 3rd | | | | 2nd | | | | 2nd |
| | | Shadow Study | | 1 | | | 2 | | | | | | | | 1 | | | 1 | |
| 3. like to play with | | | | | | | | | | | | | | | | | | | |
| | a | verbal test | | | | | | | | | | 1st | | | 3rd | | | | 2nd |
| | | pupil interview | 1st | | | | | | | | | | 2nd | | | | | | 3rd |
| | b | verbal test | 1st | | 1st | 2nd | | 3rd | | | | | | | | 3rd | | | 2nd |
| 4. actually play with | | | | | | | | | | | | | | | | | | | |
| | a | verbal test | | | | | | | | | | | | | | | | | |
| | | pupil interview | | | | | | | | | | | | | | | | | |
| | | Shadow Study | 2 | | | | 2 | | 1 | | | 1 | | | | 1 | | | 1 |
| | b | verbal test | | | | | | | | | | | | | | | | | |
| | | Shadow Study | | | | | | | | | | | | 1 | | | | | |

a = Clive's choice ; b = chosen by classmates

Note: Ranking indicates order given (verbal test) or mentioned (interview). Cardinal numbers indicate number of times behaviours observed.

Table 51. Comparisons among the sociometric verbal tests, interview report of friends, and observed social interactions of Clive.

observed to approach and/or interact with Clive during the Shadow Study day. A total of 12 classmates (seven boys and five girls) were observed to interact with Clive during the Shadow Study day alone.

Clive's sociometric choices during the verbal testing were generally not substantiated during the Pupil Interview conducted almost two weeks later, when the same questions were again asked in the course of conversation. Closer study of Table 51, however, reveals that the information gained through operator methods is generally reinforced by observed behaviours (transducer data). By summing the number of times Clive and his classmates selected or interacted with each other, it is clear that, at the time of this investigation, Peter (pupil 21) should be regarded as Clive's best friend, with Dean (pupil 1) the runner-up.

The classroom observers noted that Clive "gets along well with his classmates" (Shadow Study Summary D), and that he "plays very well with one other, doesn't need a crowd around him" (Anecdotal Notes D, 2). Although he may not have needed to be one of a crowd, Clive did at times play in groups. During the Shadow Study day, he was seen playing throughout morning recess with four classmates who included Dean and Peter. Nevertheless, the observer was most impressed with the number of friendly (often helpful) contacts Clive made in the course of one day and commented that he "Seems to get along well with everyone" (Shadow Study Notes D). When the observer later shared this opinion with Clive, he agreed that he got "along pretty well with most of the kids" in his room (Pupil Interview D). When asked if there were any of his classmates that he really had "trouble getting along with," Clive mentioned "Patty-- and sometimes Sheryl" even though he and Sheryl had apparently worked willingly, happily, and well together during the Shadow Study day (Pupil Interview D).

A similar apparent contradiction occurred in the case of Clive's friendship with Dean. Although Dean and Clive had selected each other on a number of measures and occasions (see Table 51), and they had been observed to play together or have other friendly interactions, Clive explained that Dean was the cause of Ms. Ingle having Clive move his desk to an isolated position in Room 13 (see Figure 23) because Dean talked to him too much. Also, Clive complained that Dean had bothered him by tapping on his back and talking to him during class, commenting that "He (Dean) didn't like me very much and he kept on bothering me" (Pupil Interview D). It is also interesting to note that Clive drew a picture of a cyclist inside the OSAT test booklet and labelled it "Dean." It seems likely that, in spite of his complaints, Clive enjoyed a generally positive relationship with Dean, and that the two were good friends, even beyond the school environs. (Clive mentioned that he and Dean sometimes played at Dean's home -- Pupil Interview D).

Yet another seeming contradiction existed in Clive's relationship with Peter. Although Peter was clearly the person with whom Clive had the strongest bonds (see Table 51), Clive had actually been disciplined by the principal earlier in the year for fighting with Peter! And yet, during the morning recess of the Shadow Study day, Clive ran to assist Peter when a scuffle broke out between Peter and an unknown pupil from another class who sought to interfere in Peter's play activity. Again, it would appear that young boys are able to tolerate a degree of antagonism in their relationships, yet still regard their sometime antagonists as friends.

In view of the information presented in Figure 24 and the comments of the classroom observers concerning Clive as a popular boy who "got along with everyone", it is surprising that Ms. Ingle, when asked if there was anyone who was generally popular, answered "No -- I really can't think of anybody" (Teacher Interview D, Part 1). Even though she identified a group of friends which included Peter, she did not mention Clive. It is not clear at this time whether Ms. Ingle's perception of the sociometric situation in her class as it concerned Clive was accurate or not. If the information presented in Figure 24 and Table 51 is a true reflection of Clive's social interactions, then Ms. Ingle was lacking in perception. If the latter was the case, the question of "why?" is raised, and Ms. Ingle's generally detailed knowledge and understanding of her pupils leads one to suspect that her attitudes towards Clive may have affected her proper judgement of him. Also, if the data represented in the figure and table are accurate, it is most difficult to account for Clive's poor attitudes towards his interpersonal classroom relationships and his social self-esteem amongst his classmates.

### Academic attributes, ability, and achievement

When asked to comment on the scholastic ability of her class, Ms. Ingle said that "On the whole, the class is performing like any other grade one class" (Teacher Interview D, Part 1). Later in the same interview, however, Ms. Ingle said that it seemed that her class "has more problems than any (other) grade one class" in Napier school. The problems she referred to were academic learning problems. Included amongst her pupils were two girls who were "still doing readiness work and ...

going to kindergarten for extra help." Ms. Ingle did not consider these girls ready for promotion to grade two. Three more children spent part of each day with the Special Education Teacher. Earlier in the year, Ms. Ingle had been encouraged by the progress of these three, but their rate of improvement had levelled off, and she was undecided whether they should be promoted. At the other end of the scale, Ms. Ingle had a group of 10 students which included Clive who could "work independently." Apart from the five low achievers, Ms. Ingle was "happy with the progress" the rest of her class was making academically (Teacher Interview D, Part 1).

Ms. Ingle's assessment of her class as "performing" like any other grade one class" is generally supported by the PPVT administered on May 26, 1976. In fact, Ms. Ingle's pupils showed a level of intelligence somewhat above average. From Table 52 it is seen that the mean I.Q. score for her class was 115.33, with a range from 89 to 144. The mean age equivalent of the class was 102.62 months, compared with an actual age of 82.57 months. Clive, the second oldest pupil in the class (actual age 88 months), ranked third on the basis of the PPVT with an I.Q. of 131 (more than 15 points above the mean), and an age equivalent of 125 months.

The MRT (Form A) had been administered to Clive and his classmates in September, 1975, and the results are summarized in Table 53. A comparison between the percentile ranks in Tables 52 and 53 shows great consistency, even though the tests were given eight months apart. The range of scores also remained consistent over time, perhaps reflecting the seriousness of the learning problems experienced by the five low achievers in Ms. Ingle's class.

| Item | Clive | | Class (N = 21) | | |
|---|---|---|---|---|---|
| | value | rank[a] | mean score | ( SD) | range |
| PPVT IQ | 131 | 3rd (1) | 115.33 | (15.79) | 89 - 144 |
| actual age (months) | 88 | 2nd | 82.57 | (3.58) | 76 - 89) |
| age equivalent (months) | 124 | 3rd (1) | 102.62 | | 62 - 158 |
| percentile score | 98 | 3rd (1) | 75.14 | (24.80) | 25 - 99 |

[a] figure in parentheses indicates number of classmates at equal rank

Table 52. Clive's results and class rank, with class means, standard deviations, and ranges for the Peabody Picture Vocabulary Test (Form A), May, 1976.

If the PPVT is in fact a measure of academic attributes, then Clive's item scores as recorded in Table 53 are generally to be expected. His PPVT IQ score ranked him third in his class, and his rank order on the various subtests of the MRT are consistently very high with one notable exception ("alphabet").

In order to gain a measure of pupil academic achievement over time, the MAT (Form F), was administered in June 1976, and the results are summarized in Table 54. From Table 54 it is seen that the mean percentile rank for "total math" was considerably lower than that for "total reading." The reason for this is not clear, although it may be a reflection of the emphasis placed on language rather than on mathematics by the Westham elementary school program in general and Ms. Ingle in particular. If, however, the percentile rank mean scores for "total reading" and "total math" are averaged the figure arrived at (73.10) is quite close to the class percentile rank mean scores for the MRT (75.05) and PPVT (75.14). Of more dramatic interest are the class rankings for Clive on all the MAT subtests.

| Item | Clive | | Class (N = 21) | |
|---|---|---|---|---|
| | raw score | rank[a] | mean score | (SD) |
| word meaning | 14 | 2nd (1) | 11.00 | (2.53) |
| listening | 13 | 2nd (3) | 10.14 | (2.68) |
| matching | 14 | 1st (1) | 9.67 | (3.12) |
| alphabet | 13 | 18th | 14.10 | (2.41 |
| numbers | 18 | 4th (2) | 14.86 | (3.83) |
| copying | 12 | 2nd (2) | 8.38 | (3.12) |
| total | 84 | 1st (1) | 68.14 | (13.61) |
| percentile score | 98 | 1st (1) | 75.05 | (23.10 |

[a] figures in parentheses indicate number of classmates at equal rank.

Table 53. Clive's scores and class rank, with class means and standard deviations, on the Metropolitan Readiness Test (Form A), September, 1975.

A comparison between Tables 53 and 54 shows that whereas Clive was generally ranked equal first or equal second for the MRT subtests, eight months later, he was generally ranked equal eleventh or equal thirteenth on the MAT subtests. The deterioration in Clive's comparative performance on the achievement subtests was in spite of a high rank on the PPVT measure of intelligence, and seems to indicate that there may have been particularly significant reasons to account for Clive's low achievement scores. Some weeks before the administration of the MAT in June 1976, Ms. Ingle was asked to give projected ranks for her pupils on various measures. It is interesting to note from Table 55 that Ms. Ingle was very accurate in her assessment of Clive's comparative achievement in language arts and mathematics (twelfth in both areas) compared with his rank for total reading (thirteenth) and total mathematics (eleventh) as measured on the MAT.

In order to gain a more detailed understanding of Ms. Ingle's attitudes toward Clive and his classmates, Ms. Ingle was asked to rate her pupils according to her perceptions of how well they had achieved in language arts and mathematics compared with her expectations for them. From Table 56 it is seen that Ms. Ingle's perceptions of Clive are consistent with her projected ranking of him (see Table 55), and with Clive's actual MAT rankings (in Table 54). Clive was ranked fourth of 12 pupils who "met" Ms. Ingle's expectations for language arts (nine pupils had "greatly exceeded" or "exceeded" her expectations), and he was ranked third of 11 students who "met" Ms. Ingle's expectations for mathematics (10 pupils had "greatly exceeded" or "exceeded" her expectations). It is interesting to note from Table 56 that no pupils fell "below" or "far below" Ms. Ingle's expectations for either of these measures in spite of her acknowledgement of having five low achieving pupils in her class. This observation suggests that Ms. Ingle, in ranking her students, took their academic attributes into account and gauged her expectations for each child accordingly. In view of the fact that Ms. Ingle had access to the MRT information obtained in 1975, and presuming that she was aware of the performance of each student on the MRT, it is perhaps surprising that she did not have higher expectations for Clive. Had her expectations for Clive been consistent with his MRT scores, then, on the basis of his subsequent academic performance (as confirmed by the MAT results), he would logically have been rated "below" or "far below" in terms of Ms. Ingle's perceptions compared with her expectations of him. The fact that Clive simply "met" Ms. Ingle's expectations suggests that there were factors other than academic attributes or achievement which influenced Ms. Ingle's perceptions and opinions of Clive. From Table 56 it is seen that, again in spite of the evidence of the MRT, Ms. Ingle assessed Clive's academic ability as "average" (eight pupils were assessed "very bright" or "bright," and a total of nine were assessed "average"). Finally, from Table 56 Ms. Ingle perceived Clive as one of 10 pupils "interested" in the teaching activities of the classroom (the remaining 11 pupils were perceived as being "enthusiastic").

The School Progress Report provides further evidence of Ms. Ingle's opinions and assessment of Clive's academic abilities and achievements. Her ratings of his "effort" and "achievement" in each subject area have been transposed into numerical values to facilitate discussion, and the results are presented in Table 57. Although this method of presenting Ms. Ingle's assessments does not permit a very detailed explication of Clive's performance, a useful synopsis is obtained which is made more meaningful by reference to Ms. Ingle's anecdotal comments, which are reproduced later in this section.

| Item | Clive | | Class (N = 21) | |
|---|---|---|---|---|
| | std. score | rank[a] | mean score | (SD) |
| word knowledge | 49 | 16th | 52.24 | (9.31) |
| word analysis | 39 | 18th | 47.91 | (9.35) |
| reading | 49 | 13th (1) | 50.24 | (15.78 |
| total reading | 48 | 13th | 49.81 | (11.88) |
| percentile rank | 86 | 13th | 81.24 | (27.07) |

[a] figures in parentheses indicate number of classmates at equal rank.

Table 54. Clive's standard score and class rank, with class means and standard deviations, on Metropolitan Achievement Test (Form F) items, June, 1976.

| Projected rank in class (N = 21) | |
|---|---|
| item | rank |
| language arts | 12th |
| mathematics | 12th |
| overall | 13th |

Table 55. Clive's rank in class according to Ms. Ingle's perception of her students' achievements on selected measures, May, 1976.

| Item | Placement of pupils on various 5-point scales (N - 21) | | | | |
|---|---|---|---|---|---|
| perceived achievement level cf expectations for LA | 4 greatly exceeded | 5 exceeded | 12 met — 4th[a] | 0 below | 0 far below |
| perceived achievement level cf expectations for Math | 5 greatly exceeded | 5 exceeded | 11 met — 3rd[a] | 0 below | 0 far below |
| perceived attitudes toward classroom teaching | 11 enthusiastic | 10 uninterested[a] | 0 passive | 0 uninterested | 0 resistant |
| assessment of academic ability | 4 very bright | 4 bright | 9 average[a] | 4 below average | 0 dull |

[a] indicates Clive's placement

Table 56. Ms. Ingle's placement of her pupils on various 5-point scales according to her perceptions of them on selected measures, May, 1976.

| Item | Max. score | Winter 1975 | | | Summer 1976 | | |
|---|---|---|---|---|---|---|---|
| | | Clive's total scores | class mean | (S.D.) | Clive's total scores | class means | (S.D.) |
| group participation | 16.0 | 6.0 | 8.24 | 1.31 | 8.5 | 9.5 | 2.13 |
| individual participation | 16.0 | 7.0 | 8.19 | 1.01 | 8.0 | 10.24 | 8.45 |
| working skills | 12.0 | 5.0 | 5.67 | 1.58 | 6.0 | 6.91 | 2.40 |
| LA effort | 24.0 | 10.0 | 12.00 | 1.95 | 12.5 | 14.75 | 2.79 |
| LA achievement | 24.0 | 11.0 | 11.62 | 1.86 | 13.0 | 14.86 | 2.85 |
| Math effort | 4.0 | 2.0 | 2.19 | 0.96 | 2.0 | 2.60 | 0.88 |
| Math achievement | 4.0 | 2.0 | 2.10 | 0.81 | 2.0 | 2.48 | 0.79 |
| Science/Health effort | 4.0 | 3.0 | 2.14 | 0.36 | 3.0 | 2.69 | 0.54 |
| Science/Health achievement | 4.0 | 2.0 | 2.09 | 0.30 | 3.0 | 2.69 | 0.54 |
| S.S. effort | 4.0 | 2.0 | 2.52 | 0.60 | 2.5 | 3.05 | 0.71 |
| S.S. achievement | 4.0 | 2.0 | 2.29 | 0.46 | 2.5 | 3.05 | 0.71 |
| Art effort | 4.0 | 2.0 | | | 2.5 | | |
| Art achievement | 4.0 | 2.0 | | | 2.5 | | |
| Music effort | 4.0 | 2.0 | | | 2.0 | | |
| Music achievement | 4.0 | 2.0 | | | 2.0 | | |
| P.E. effort | 4.0 | 2.0 | | | 3.0 | | |
| P.E. achievement | 4.0 | 2.0 | | | 3.0 | | |
| Printing/Handwriting effort | 4.0 | 2.0 | 2.29 | 0.56 | 2.5 | 2.86 | 0.92 |
| Printing/Handwriting achievement | 4.0 | 2.0 | 2.29 | 0.56 | 2.5 | 2.81 | 0.89 |

Note: total class scores were not available for some items

Table 57. Clive's scores for "effort" and "achievement", with class means and standard deviations, obtained from the School Progress Report .

From Table 57 it is evident that at the time of the Winter, 1975 report, Clive scored appreciably lower than the class mean for all timetable subjects except "effort" in Science/Health. The gap between Clive's scores and the class means widened over the year for all subjects except "effort" and "achievement" in Science/Health. Clive's scores for performance as an individual and group member, and for working skills were similarly lower than the class means.

For the December 1975 report, Ms. Ingle rated Clive's performance for cooperation "as a leader/follower as required" and for acting "from a consideration of others" as "needs to improve." On the final report in June, 1976, Clive was rated "satisfactory" and "satisfactory plus" respectively on both measures, indicating that Ms. Ingle considered he had improved as a group member. Similar improvements were noted in the areas of individual participation ("thinks for himself while respecting the opinions of others"), and working skills ("listens attentively").

Clive's problematic low performance both on the criteria contained in the MAT and on Ms. Ingle's criteria, as reflected in the School Progress Report, is further confirmed by her anecdotal comments reproduced below. These comments were entered into the report card in January, April, and June, 1976, although for some subject areas no comment was made in June.

> Clive still keeps on getting into fights and seldom realizes the consequences (January 1976).
>
> Clive seems to be controlling his emotions. He has been in fewer fights and seems to be settling down (April 1976).
>
> Clive shows a lot more positive attitude towards school and others (June 1976).

Clive's phonic and word attack skills have improved, but time needs to be spent on improving reading comprehension. He should listen carefully for details and main ideas of the story (January 1976).

Clive still does not know all his core vocabulary. It would help tremendously if he learns his words, then he will be able to read fluently without forgetting the main idea of the story (April 1976).

Clive has put in a lot of effort this year. I am pleased with his progress. He should keep up extra reading at home to give him confidence with the new words (June 1976).

Clive has improved his understanding of basic concepts in Math. He can mostly add and subtract without any problems. But he should practice writing his numbers at home as he reverses most of them (January 1976).

Now we are working with higher numbers. Clive needs to practice adding and subtracting those numbers to improve accuracy (April 1976).

Clive needs to practice his numbers and additions and subtractions at home (June 1976).

He shows an inquisitive mind and gets involved a lot in these areas (in Science/Health -- January 1976).

Shows good involvement (in Science/Health -- April 1976).

He participates in and benefits from class discussions and activities (in Social Studies -- January 1976).

He can orally express his own experiences and feelings (in Social Studies -- April 1976).

He takes part willingly in all Art activities (January, 1976).

Shows satisfactory progress (in Art -- April 1976).

He can memorize simple songs and finger plays (in Music -- January 1976).

Shows satisfactory progress (in Music -- April 1976).

He takes an active part in gym. activities (January 1976).

Clive can cooperate in games and activities (April 1976).

> He can print neatly with correct letter formation (January 1976).
>
> I am pleased with his neatness in printing (April 1976).

It is seen from these comments that, in spite of the early promise of his scores on the MRT, September 1976 (see Table 53), Ms. Ingle identified several important skills in which Clive was deficient. Clive's learning problems were most notable in language arts and mathematics. In language arts his main problems seemed to be in the area of vocabulary, whereas in mathematics he had problems of visual perception as represented by reversals in formulating his figures. This latter problem is most often a developmental matter, but it is also a symptom of dyslexia, a learning disability which is in part denied, however, by his neat and correct printing/handwriting capability. Another frequent symptom of dyslexia is frustration which often erupts into the type of aggressive behaviour which Ms. Ingle had noted in Clive, particularly in the January report (see p. 355). This type of behaviour had become much less obvious throughout the year, however, and was recorded only once during the course of this investigation, and then only in a gesture of assistance and support to his friend, Peter. In fact, as noted earlier, the classroom observers were impressed with Clive's friendly, helpful manner toward his classmates, and his popularity.

According to the MCI difficulty of schoolwork factor Clive's score was only slightly above the class mean. The class in general did not perceive schoolwork to be very difficult. In the course of the Pupil Interview, Clive mentioned that he sometimes had problems with his arithmetic, and used his fingers to do "minuses and hard pluses."

He readily recognized that Peter (highest scorer in the class on the total mathematics test, MAT, 1976) was better at mathematics, but said that he, in turn, helped other people with their schoolwork. One classroom observer commented that Clive seemed to be able to do his schoolwork "without much trouble" (Pupil Interview D), and yet the testimony of both Ms. Ingle and the results of the MAT (see Table 54) are difficult to refute. Judging Clive subjectively, and bearing in mind the evidence of the MRT (September 1975) and the PPVT (June 1976), one is tempted to speculate that Clive had above average intelligence and the potential to achieve at a high academic level. It would appear, however, that his progress had been delayed by minor learning difficulties which appear to have been partly based on a visual perceptual dysfunction, which might in turn have been a matter of slow development, or subject to remediation. There is no evidence that Clive had been screened for specific learning disabilities, nor had he been referred to the remedial teacher. It seems likely that Ms. Ingle's consideralbe experience with grade one children led her to suspect that Clive's learning problems were developmental and would simply disappear over time, a process which already appeared to have begun.

Classroom coping behaviour

According to data collected during CASES observations and summarized in Table 58, the predominant styles of behaviour of Ms. Ingle's class in both language arts and mathematics were "attentive, adult-oriented, and compliant" (Style E), and "conforming, passive, and submissive to directions" (Style H) in TD settings. Clive's behaviour was particularly Style E, especially in mathematics, which probably accounts

| CASES coping styles | TD settings | | | | | | NTD settings | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LA | | Math | | Combined[a] | | LA | | Math | | Combined[a] | |
| | score | vis % | score | vis% | score | vis% | score | vis % | score | vis% | score | vis % |
| A (aggressive, manipulative) | | 0.0 | | 0.0 | | 0.0 | 6 | 0.86 | | 0.0 | 6 | 0.65 |
| class $\overline{X}$ | | 0.09 | | 0.0 | | 0.07 | | 0.22 | | 0.10 | | 0.21 |
| S.D. | | 0.15 | | 0.0 | | 0.12 | | 0.29 | | 0.32 | | 0.25 |
| B (resistant, peer-oriented) | 13 | 0.38 | 2 | 0.27 | 15 | 0.36 | 25 | 0.57 | | 0.0 | 25 | 0.43 |
| class $\overline{X}$ | | 0.35 | | 0.18 | | 0.36 | | 0.14 | | 0.05 | | 0.13 |
| S.D. | | 0.22 | | 0.22 | | 0.18 | | 0.13 | | 0.14 | | 0.11 |
| C (passive, dreamy) | | 0.0 | 1 | 0.67 | 1 | 0.12 | 1 | 0.11 | | 0.0 | 1 | 0.09 |
| class $\overline{X}$ | | 0.65 | | 0.20 | | 0.58 | | 0.20 | | 0.17 | | 0.21 |
| S.D. | | 0.48 | | 0.38 | | 0.39 | | 0.26 | | 0.53 | | 0.26 |
| D (distractible, peer-dependent) | 4 | 0.15 | | 0.0 | 4 | 0.12 | 4 | 0.11 | | 0.0 | 4 | 0.09 |
| class $\overline{X}$ | | 0.48 | | 0.32 | | 0.47 | | 0.33 | | 0.26 | | 0.36 |
| S.D. | | 0.29 | | 0.45 | | 0.29 | | 0.28 | | 0.43 | | 0.30 |
| E (attentive, adult-oriented) | 62 | 2.28 | 24 | 4.00 | 86 | 2.59 | 6 | 0.17 | 1 | 0.15 | 7 | 0.15 |
| class $\overline{X}$ | | 1.65 | | 1.95 | | 1.75 | | 0.27 | | 0.31 | | 0.27 |
| S.D. | | 0.62 | | 1.52 | | 0.60 | | 0.17 | | 0.53 | | 0.16 |
| F (assertive, task-oriented) | 1 | 0.04 | | 0.0 | 1 | 0.03 | 52 | 1.49 | 10 | 1.52 | 75 | 1.62 |
| class $\overline{X}$ | | 0.10 | | 0.0 | | 0.08 | | 1.02 | | 0.33 | | 0.96 |
| S.D. | | 0.10 | | 0.0 | | 0.08 | | 0.38 | | 0.49 | | 0.32 |
| G (independent, on-task) | | 0.0 | | 0.0 | | 0.0 | 76 | 1.25 | 19 | 1.65 | 106 | 1.31 |
| class $\overline{X}$ | | 0.04 | | 0.05 | | 0.03 | | 1.70 | | 1.16 | | 1.70 |
| H (conforming, passive) | 56 | 1.37 | 3 | 0.33 | 59 | 1.18 | 4 | 0.08 | 3 | 0.30 | 7 | 0.10 |
| class $\overline{X}$ | | 1.39 | | 0.94 | | 1.35 | | 0.10 | | 0.20 | | 0.12 |
| S.D. | | 0.49 | | 0.69 | | 0.42 | | 0.96 | | 0.32 | | 0.10 |
| Overall CASES Coefficient | | 5.67 | | 6.33 | | 5.79 | | 7.46 | | 8.30 | | 7.75 |
| class $\overline{X}$ | | 5.19 | | 4.56 | | 5.24 | | 7.60 | | 4.80 | | 7.52 |
| S.D. | | 0.41 | | 2.33 | | 0.42 | | 0.50 | | 3.50 | | 0.50 |

[a] Combined total includes tallies from other subject areas

Note: underlining indicates behaviour is visible ( > 1.00)

Table 58. Behavioural styles of Clive and his classmates according to setting and subject matter (CASES D).

for his evincing fewer Style H behaviours in that subject. Also in TD settings, eight of the pupils were visibly "passive, withdrawn, avoidant, and dreamy" (Style C), whereas Clive was one of three pupils who showed no trace of such behaviour.

In NTD settings, all of Ms. Ingle's pupils were visibly "appropriately task-oriented, independent, and self-motivated" (Style G). In addition, Clive was one of 11 students who were "assertive, socially integrative, and task-oriented" (Style F). The only other clearly visible behaviour was that of one pupil who was "peer-dependent, distractible, and off-task" (Style D). It is interesting to note that Clive and his friend Peter showed the most "dominative, active aggressive, annoying, and manipulative" (Style A) behaviours in NTD language arts settings only, although these did not quite reach CASES visibility.

Anecdotal reports by the classroom and Shadow Study observers generally supported the CASES data:

> Much self-directed pupil activity -- busily engaged in activities -- little need for teacher supervision -- children were goal, lesson, and classwork oriented ... No disruptive behaviour, no teacher checks. This is an impressive feature of the classroom (Anecdotal Notes D, 1).
>
> A feature of this lesson, and perhaps of the whole class is that when they have completed their work they (the pupils) can go into enrichment activities and games; here they can indulge their interests. They do this work with the minimum of supervision (Anecdotal Notes D, 1).
>
> Indoor recess (behaviour) was excellent. Pupils were self-directed and displayed appropriate social behaviour — not even a loud voice (Anecdotal Notes D, 2).
>
> The atmosphere (of Ms. Ingle's room) ... required independent, responsible behaviour on the part of the pupils. They carried this out with few reminders by the teacher... the pupils were consistently on-task, with very little deviance (Shadow Study Summary D).

On the other hand, there were times when Ms. Ingle's class as a group was observed to behave in less desirable fashion:

> The classroom (temperature) was 24°C, the children were tired-looking -- gazed around, watched passively, or talked. The teacher said, 'That's the worst they've been for you.' (Anecdotal Notes D, 1)

But such inappropriate behaviour by the whole class was unusual, as indicated by both CASES data and anecdotal records. The general atmosphere in Room 13 was one of pleasant, unusually quiet purposefulness.

No one instrument captures the total behaviour of an individual. Through reference to the recorded interview with Ms. Ingle, and through an examination of the anecdotal reports made by the classroom observers, specific incidents may be cited which further clarify Clive's classroom behaviours. After one language arts lesson, for example, Ms. Ingle recalled being pleased during the lessons because Clive, "who is the last person to finish a story," had finished his work quickly. Ms. Ingle had made arrangements for her pupils to see a filmstrip upon completion of their work and this, she felt, was what had stimulated Clive's speedy response -- he was the first in the class to finish, although he had made several spelling errors (Teacher Sort Task Interview D, 2). On another occasion, Ms. Ingle was pleased when Clive considered he had completed his seatwork and began to use the classroom games without further instructions. Ms. Ingle brought him back to his seat, however, because the work had not been properly completed (Teacher Sort Task Interview D, 1).

In addition to commenting on Clive's tardiness in completing academic tasks, Ms. Ingle also criticized Clive for inappropriate chatting. On one occasion, for example, she checked him for chatting while a classmate was making a class presentation (Stimulated Recall Interview D, 1). On another occasion, while discussing the behaviour of the following a lesson, Ms. Ingle noted that Clive and Tim "are forever talking" (Teacher Sort Task Interview D, 3). Clive's general ability to cope successfully in the classroom setting, however, is summarized by reference to his OCC (see Table 58). His OCC is higher, sometimes considerably so, than the class mean in all situations except language arts in TD settings.

According to Table 58, Clive's misbehaviours did not attain visibility. By classifying the CASES data more broadly, however, (see Table 59) it is obvious that, although his behaviour was generally visibly "desirable" in almost all subject/setting combinations, Clive's behaviour was frequently visibly inappropriate. From Table 59, it is seen that Clive's behaviour was most "desirable" in mathematics, particularly in NTD settings. His most "inappropriate" behaviours occurred in language arts, also in NTD settings. This interpretation of the CASES data lends support to Ms. Ingle's comments and view of Clive's behaviour.

Further evidence to help clarify the matter of Clive's classroom behaviour may be elicited from the Shadow Study records. It is acknowledged that the Shadow Study was conducted for one day only. Furthermore, because Ms. Ingle had previously caused Clive to move his desk to an isolated position in response to his frequent chatting, Clive's behaviour during the Shadow Study day may not have been typical for him. From Figure 23 (see p. 326), it is clear that Clive spent over one quarter of his time actually in or at his desk. One half of

| Behaviour classification | TD settings | | | | | | NTD settings | | | | | | Both settings | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LA | | Math | | Combined$^d$ | | LA | | Math | | Combined$^d$ | | LA | | Math | | Combined$^d$ | |
| | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % |
| desirable$^a$ | 119 | 87.50 | 27 | 90.00 | 146 | 87.95 | 138 | 79.31 | 33 | 100 | 195 | 84.42 | 257 | 82.90 | 60 | 95.24 | 341 | 85.89 |
| inappropriate$^b$ | 17 | 12.50 | 3 | 10.00 | 20 | 12.05 | 31 | 17.82 | | | 31 | 13.42 | 48 | 15.48 | 3 | 4.76 | 51 | 12.85 |
| unacceptable$^c$ | | | | | | | 5 | 2.87 | | | 5 | 2.16 | 5 | 1.61 | | | 5 | 1.26 |
| total | 136 | | 30 | | 166 | | 174 | | 33 | | 231 | | 310 | | 63 | | 397 | |

$^a$visible at 80%

$^b$visible at 10 - 15%

$^c$visible at 3%

$^d$includes tallies from other subjects

Table 59. Classification of Clive's behaviour according to subject and setting (CASES D).

Clive's time was spent directly under Ms. Ingle's supervision in either a group discussion or individual assistance situation. Clive's locations for the remaining time were quite appropriate and on-task and included lining up to leave for recess, doing art work on the floor, and walking across the room to obtain work materials.

The detail of Clive's classroom behaviour is perhaps best typified by the following excerpts from the speciment descriptions recorded by the Shadow Study observer:

> 9:10 a.m. --- sat passively waiting for ... the books. Once the books arrived and teacher was giving explanations, Clive paid close attention.
>
> 9:20 a.m. For the first few seconds, Clive was twisting a pencil in his right hand. Took work off the board and wrote it down. Worked intently.
>
> 9:30 a.m. Clive worked intently.
>
> 9:40 a.m. ... Clive reads intently.
>
> 10:20 a.m. Clive gazed around briefly, hunched forwards now, reading and writing.
>
> 11:00 a.m. Clive was sitting ... with the teacher ... having his work corrected. He was daydreaming as the teacher asked him a question.
>
> 12:50 p.m. After a smile at Warren and a brief observation of the teacher with Trevor, Clive gets to work. Ms. Ingle comes over, examines his work and praises him.
>
> 1:00 p.m. Works intently, not paying attention at all to students moving to and from teacher.
>
> 1:10 p.m. Clive picks up book ..., shows Trevor and Tracy, sits down and starts looking at the book. Not distracted by another teacher who comes in to see his teacher.
>
> 1:50 p.m. Clive returns to work after telling two other pupils what his partner is going to do (for the lesson's art project). Told by others to make some girls (for his painting, Clive says) "No!" Sitting talking to partner, legs crossed. Sharing ideas with others. Relating very well to pupils around him (Shadow Study Notes, D).

Because Ms. Ingle had previously caused Clive to move his desk away from other pupils (see Figure 23), Clive's on-task behaviour may have been more pronounced than usual during the Shadow Study day. Nevertheless, Clive's generally pleasant, sociable manner, with lengthy periods of intense study, and fitfully frequent social interactions which were apparent during the Shadow Study day are largely reflected in the more extensive CASES data. Another feature of Clive's behaviour common to both CASES and Shadow Study data was the low incidence of "unacceptable" behaviour. Most of the few recorded incidents of "unacceptable" behaviour concerned Clive hiding under Ms. Ingle's desk when he should have been working elsewhere in the room. During this investigation, there were no observed or recorded incidents of Clive fighting or being aggressive in the classroom. It would seem that the aggressive behaviour which Clive had displayed earlier in the year had been largely sublimated.

Table 60 contains a comparison of Clive's behaviours during the Shadow Study day with his behaviours as recorded by the CASES observation data. There is a high degree of consistency between the two sets of data, which leads to the expectation that the details of the Shadow Study observations were probably typical of Clive's classroom behaviours in the latter part of his grade one year. If this assumption is correct, then it is fair to describe Clive as a generally well-behaved, cooperative, and friendly student who was capapble of periods of independent and intensive study, but who also indulged in a visible amount of mildly inappropriate (certainly not malicious nor aggressive) classroom behaviour.

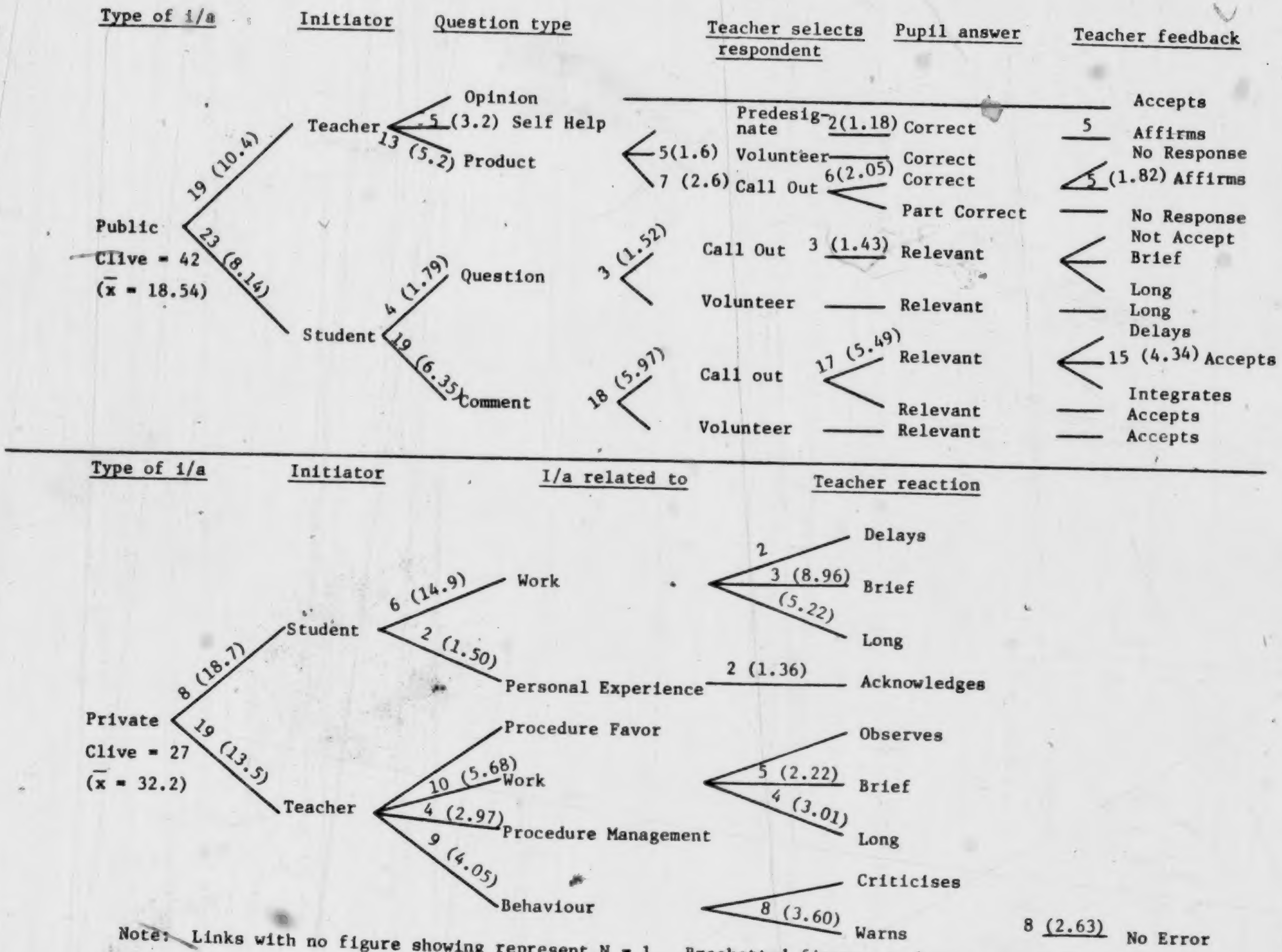
| Behaviour classification | Threshold visibility % | CASES data % | Shadow Study % |
|---|---|---|---|
| desirable | 80 | 85.89 | 83.33 |
| inappropriate | 10 - 15 | 12.85 | 15.28 |
| unacceptable | 3 | 1.26 | 1.39 |

Table 60. Classification of Clive's behaviour according to actual CASES data, and a CASES analysis of the Shadow Study specimen record data.

Besides his interactions with classmates, Clive was also involved in many dyadic interactions with Ms. Ingle. According to data collected during the DICOS observations in eight language arts lessons, Clive interacted with his teacher on a total of 60 occasions (class mean = 50.70). Of these, 42 interactions (class mean = 18.54) were public, 19 (class mean = 10.40) being initiated by Ms. Ingle, and 23 (class mean = 8.14) by Clive (Figure 25). It is interesting to note from Figure 27 that 26 of Clive's public interactions were called out responses. Most of these call outs were correct or relevant responses which Ms. Ingle either affirmed or accepted.

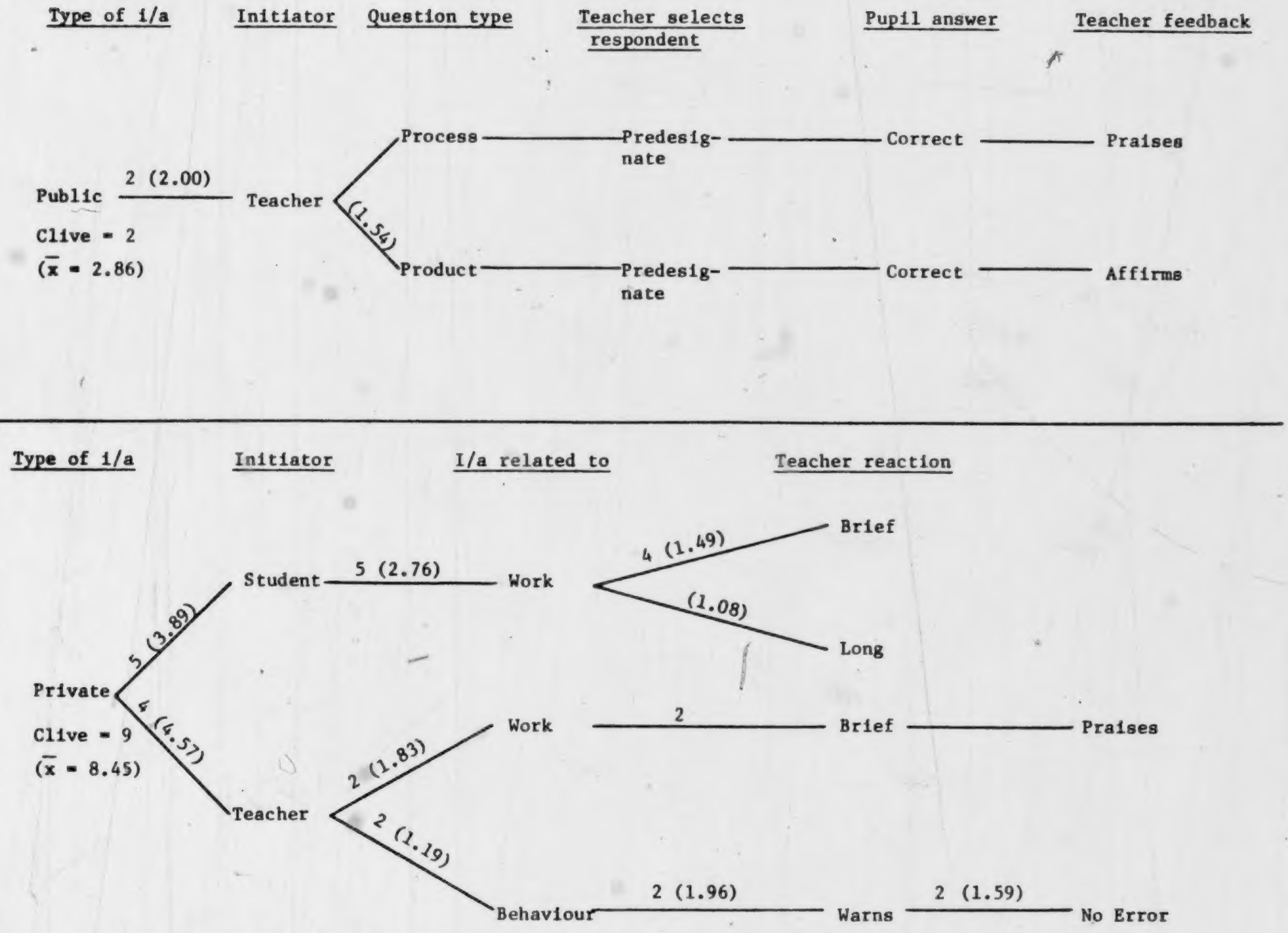
Clive had fewer private interactions with Ms. Ingle than his classmates (Figure 25). More than two-thirds of these were initiated by Ms. Ingle and dealt mainly with work or behaviour warnings and criticism. In fact, Clive's inappropriate behaviours were privately checked by Ms. Ingle twice more frequently than the class average.

From Figure 26 it is seen that in two mathematics lessons the number of Clive's dyadic interactions with Ms. Ingle was very close to


Type of i/a
Initiator
Question type
Teacher selects respondent
Pupil answer
Teacher feedback
Public
Clive = 42
($\bar{x}$ = 18.54)
19 (10.4)
23 (8.14)
Teacher
Opinion
5 (3.2) Self Help
13 (5.2) Product
5(1.6)
7 (2.6)
Predesig-nate
2(1.18) Correct
Volunteer
Correct
Call Out
6(2.05)
Correct
Part Correct
Accepts
5
Affirms
No Response
5 (1.82) Affirms
No Response
Not Accept
Brief
Long
Long
Delays
15 (4.34) Accepts
Integrates
Accepts
Accepts
Student
4 (1.79) Question
19 (6.35) Comment
3 (1.52)
Call Out
3 (1.43) Relevant
Volunteer
Relevant
18 (5.97)
Call out
17 (5.49)
Relevant
Relevant
Volunteer
Relevant
Type of i/a
Initiator
I/a related to
Teacher reaction
Private
Clive = 27
($\bar{x}$ = 32.2)
8 (18.7)
19 (13.5)
Student
6 (14.9) Work
2 (1.50) Personal Experience
2
Delays
3 (8.96) Brief
(5.22)
Long
2 (1.36)
Acknowledges
Teacher
Procedure Favor
10 (5.68) Work
4 (2.97) Procedure Management
9 (4.05) Behaviour
Observes
5 (2.22) Brief
4 (3.01) Long
Criticises
8 (3.60) Warns
8 (2.63) No Error

Note: Links with no figure showing represent N = 1. Bracketted figures = class mean > 1.00.

Figure 25. Nature of the public (class N = 407) and private (class N = 709) interactions between Clive and Ms. Ingle in eight language arts lessons (DICOS D).


Type of i/a
Initiator
Question type
Teacher selects respondent
Pupil answer
Teacher feedback
Public
Clive = 2
(x̄ = 2.86)
2 (2.00)
Teacher
(1.54)
Process
Product
Predesig-nate
Predesig-nate
Correct
Correct
Praises
Affirms
Type of i/a
Initiator
I/a related to
Teacher reaction
Private
Clive = 9
(x̄ = 8.45)
5 (3.89)
4 (4.57)
Student
5 (2.76)
Work
4 (1.49)
(1.08)
Brief
Long
Teacher
2 (1.83)
2 (1.19)
Work
2
Brief
Praises
Behaviour
2 (1.96)
Warns
2 (1.59)
No Error

Note: Links with no figure showing represent N = 1. Class means < 1.00 not shown.

Figure 28. Nature of the public (class N = 63) and private (class N = 186) interactions between Clive and Ms. Ingle in two mathematics lessons (DICOS D).

the class average. Furthermore, the number of Clive's interactions in both public and private domains was quite close to the class mean. Because the DICOS observation were recorded in only two mathematics lessons there are insufficient data to make strong inferences. The reduced number of dyadic interactions (compared with the class means) between Clive and Ms. Ingle is noticeable, however, and especially the total absence of call outs from Clive.

In private interactions in mathematics, as in private interactions in language arts, Clive initiated dyadic public contact with Ms. Ingle mainly related to work (Figure 26). Ms. Ingle's initiations were either work or behaviour related.

The next section will present a discussion of the various facets of Clive's school experience as introduced and explained in this and previous sections.

## Discussion

The discussion presented here will focus on salient points contained in the previous sections and which seem to have special significance for Clive's life as a school pupil. Where appropriate, cause and effect relationships among the factors brought into the discussion will be suggested. Finally, evaluative comments will be made concerning the formal education experienced by Clive.

In some respects Clive was not a contented child. Although he was happy to be in Ms. Ingle's class and to attend Napier school, he had poor attitudes in his interaction with instruction. Also, he had low social self-esteem in his relationships with his classmates and in his home setting. Yet, when Clive's social settings are examined, there seems to have been little reason for his negative attitudes. His parents were apparently supportive and caring in their attitudes and behaviours toward Clive, and he acknowledged that he enjoyed their company and love. At school, Clive's attitude toward Ms. Ingle was very negative, however, and may help provide some rationale for Clive's discontentment.

Earlier in his grade one year Clive had frequently been aggressive in his behaviours toward his classmates and had been checked repeatedly for fighting -- even to the point of having been referred to the principal for chastisement. Ms. Ingle's educational goals, teaching style, and classroom routines all favoured a warm, informal atmosphere which was largely pupil-centred. Such an atmosphere depended upon positive pupil response and cooperation and could not tolerate serious disruptive behaviours from any of the pupils. In view of Clive's often undesirable acts, Ms. Ingle found it necessary to check and scold Clive, thereby encouraging the establishment of negative attitudes on Clive's part -- attitudes which lingered even though the initial cause had disappeared.

The cause of Clive's aggressive behaviours is not clear, but when linked with other factors (such as his tendency to make reversals in writing numbers, and his problems with language in spite of a high level of measured intelligence -- Table 48, and high scores on the MRT -- Table 49) the early aggression may be seen as one of a number of symptoms of dyslexia. Dyslexic problems and their related behaviours are frequently developmental in nature, and disappear with the passage of time and increased maturity in the child. Such seems to have been the case with Clive.

In the course of his grade one year, Clive's social behaviour, and his behaviour in instructional settings improved considerably. In spite of these improvements, Ms. Ingle maintained a somewhat negative attitude toward Clive, an attitude which appears to have dated back to Clive's earlier disruptive behaviours and which may have been induced in part by Clive's called-out responses in public interactions in class.

What is suggested here is that the starting point of a "vicious cycle" of factors in the school life of Clive was in fact his language and perceptual difficulties. These difficulties led to low academic achievements (Table 53) which were not commensurate with his comparatively high level of intelligence and academic aptitude (Tables 48 and 49). His subsequent academic inabilities gave rise to frustrations which resulted in aggressive acts. These acts were intolerable in

Ms. Ingle's classroom setting and led to negative interactions between Clive and Ms. Ingle, and the establishment in Ms. Ingle of low expectations for Clive's academic performance.

Because of Ms. Ingle's necessarily repressive acts towards him, Clive grew to dislike her. And because of Ms. Ingle's low expectations for his academic accomplishments, Clive's early academic promise (Table 49) was not realized (Table 50), in spite of his maintaining high academic aptitudes (Table 48). In responding to Ms. Ingle's expectations for him, Clive's comparatively low scores on the MAT in June, 1976 (Table 50) closely approximated Ms. Ingle's perceptions of his abilities as stated just prior to the administration of the MAT (Table 51).

At the time of this investigation, Clive was the most popular pupil in his class (Figure 24 and Table 47), yet his social self-esteem on various measures (Tables 45 and 46) was among the lowest in the class. Again, it appears that the early experiences in grade one helped implant these attitudes in Clive. It has been shown (Table 47) that his classmates did not maintain negative attitudes toward Clive -- Clive's attitudes, therefore, seem to have become internalized.

Such negative attitudes could be expected of Clive if Ms. Ingle, in her earlier remonstrances with his disruptive behaviours, had caused him to feel guilty, inferior, and embarrassed. That such an explanation is plausible is supported by the observations made in the course of this investigation, for in checking undesirable pupil behaviours, Ms. Ingle frequently invoked the rationale of disturbing and being unfair to classmates. Such arguments may well have established in Clive a sense of guilt and a low self-esteem.

The picture of Clive at the time of this investigation was that of a well-motivated pupil, who typically exhibited on-task and desirable behaviours (Tables 54, 55, and 56), who was physically active and playful, and who was very popular with his classmates. Furthermore, Clive enjoyed his class and being at school. On the other hand, Clive was not gaining as much as he could out of school either socially or academically. These aspects of his school life served to diminish Clive's potential for success and enjoyment as a school pupil.

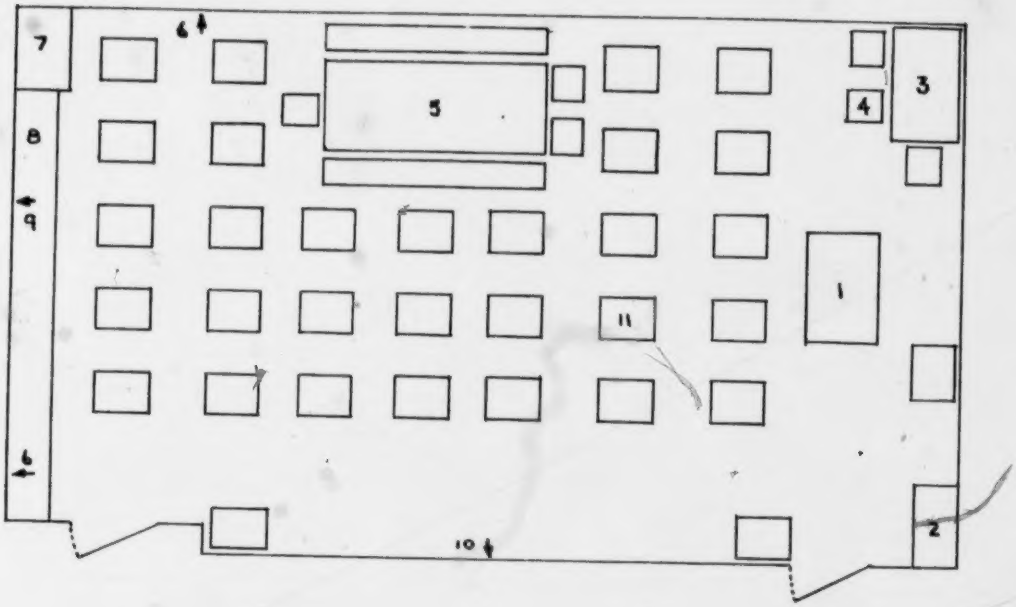
It has not been the intent of this discussion to account for all the factors which may have a bearing on Clive's school experience -- reference has been made only to the most salient items. Neither has this discussion sought to explore all the possible ramifications of the issues raised. But the scenario suggested here is based upon corroborative evidence and indicates the need for a change in teacher attitudes and behaviours in order to arrive at an improved educational experience for Clive. Furthermore, one has the sense that, if made aware of the factors as described above, Ms. Ingle would agree that the educational situation as experienced by Clive could be enhanced, and that it would be in her power to effect improvements.

## The grade three classroom: Room 6

Room 6 was located in the north-west corner of the ground floor in the original part of Napier school (see Figure 21, p.307). From Figure 27 it is seen that the room was quite long, but narrow. One of the shorter walls was dominated by windows (complete with Venetian blinds) which reached from just above desk height to the ceiling. The windows looked out on to a section of the school field and the school's small collection of playground equipment.

The room was well lit both by natural light and fluorescent lighting. But heavy dark-brown beams, a dull wood ceiling, a gray tiled floor, and pale green walls half covered with buff tiles, all combined to help give the room a sense of dullness and coldness, in spite of there being sufficient light for all classroom purposes. Entry into Room 6 from the school was through a small vestibule, which also led into classroom 7, and provided a wash-basin and a limited amount of storage. Outside entry into Romm 6 was available via a mud-room (shared with the pupils of Room 7) located near the south corner of the room.

The room was not richly decorated. Pupil art projects lined the wall beneath the chalkboard (cotton rabbits on cartridge paper), and were fixed to the long tack-board (newspaper cut-outs of snowflakes and pupil profiles) at the rear of the room. The long tack-board also contained some art work, news clippings, a map of Alberta, a list of adjectives, and a list of word endings. Part of the window tack-board contained a "Guide to Good Grooming" notice and posters illustrating a thermometer and advertising the slogan "I'm O.K. - you're O.K." This latter poster was used as a device for encouraging children to contact



KEY

1. Teacher's Desk
2. Cupboard
3. Work Table
4. Chairs
5. Table and Benches
6. Tackboards
7. Heater Fan
8. Storage Shelves
9. Windows
10. Chalkboards
11. Pupil Desks

Figure 27

Environmental Details of Room 6, Napier School

the teacher regarding personal problems. Children initiated the communication by attaching a closed note to the poster, which the teacher later collected and responded to. The tack-board behind the teacher's desk was intended to give information about Canada, but had little on it. Teacher-prepared pupil achievement charts had been fixed to the wall near the teacher's desk.

The major furnishings of the room included 29 pupil desks arranged in rows; three dispersed pupil desks; a large table with two benches and three chairs; a teacher's desk; a small work table with three chairs; a storage cupboard; and storage shelves lining the wall beneath the windows. The top of the window shelves provided additional work-space. Instructional equipment included one long chalkboard, one large and two smaller tack-boards, and a suspended film screen. Mechanical audio-visual equipment was available via Napier School's own instructional equipment storage. A few instructional games in mathematics and language arts were stored on the window shelves. Other learning materials included a large dictionary and a set of dictionaries for use in the language arts program, and learning activity files for use by pupils who completed set tasks ahead of their classmates.

Apart from the usual paper supplies for pupil use, there was little additional material in Room 6. Each pupil had a decorated cardboard box in which personal work materials were kept, and these were stored on the window shelves. The teacher's supplies and pupil records were kept in her desk and in the cupboard close to her desk.

Classroom observers found the ambient conditions of Room 6 to be quite pleasant. The room temperature generally ranged from 20°C to 23°C (although the room was noticeably cooler in the mornings and warmer as each day worn on). Heat and air flow were assisted by a heater and fan housed in one corner of the room. This unit issued a constant low hum which seemed not to be distracting, except for occasional noisy operation. Few noises seemed to penetrate the room from the school or the outdoors.

The teacher made regular, routine limited use of the available classroom space. Pupils performed individual learning tasks only at their own desks, except for the comparatively few occasions when individuals made use of the learning activities at the window shelves. The large table was used for some group work, and quite rarely by individual pupils. Teacher-led group discussions and group learning activities were conducted on the floor on either side of the chalkboard. For these occasions, the teacher sat in the pupil desk provided, and the children sat on the tiled floor (see Figure 30). One classroom observer noted that there was:

> Lots of space -- lots of potential for more private work area, but not fully used. Big space between desks and blackboard (Environmental Inventory E, 1).

There seemed to be no attempt to establish learning stations for independent and self-directed pupil activities.

## The grade three teacher: Ms. Newton

### Introduction

Ms. Irene Newton was born and first attended school in a small town in one of the maritime provinces of eastern Canada. She moved to Westham with her father, mother, brother, and sister when her father changed his post as a medical radiologist. Ms. Newton's mother remained as the home-maker. At the time of this investigation, Ms. Newton lived at home with her parents.

Ms. Newton had completed high school in Westham. She then attended business college for two years before enrolling in a four-year Bachelor of Education program with a specialty in Early Childhood Education. She had graduated only five months before this investigation was conducted, and had actually taught for only two months. Apart from student teaching, Ms. Newton's teaching experience was limited to Napier School.

Ms. Newton was in her early twenties, a tall, quiet person, with a firm and reserved manner. She joined Napier School specifically to teach the grade three class assigned to her, since the previous teacher had had to leave quite suddenly. Ms. Newton claimed she enjoyed teaching, and she took her work and responsibilities very seriously (for example, she was usually in school at least 30 minutes before opening exercises, and she returned to school in order to prepare for her teaching on at least three evenings each week). According to the classroom observers, who also observed and interacted with Ms. Newton in the teachers' staffroom, Ms. Newton lacked self-assurance in the company of other teachers. But it should be made clear that she was by far the youngest person on a faculty that included several teachers with more than thirty years' teaching experience.

Ms. Newton's inexperience, her comparative youth, and the fact of this investigation may all have been factors which contributed to her observed classroom behaviours. After four weeks of quite frequent and lengthy periods of classroom observations, one of the observers noted that Ms. Newton:

> Rarely smiles, never laughs, often frowns or looks reprovingly. She stresses training, making pupils repeat classroom management activities (in spite of their generally) ... responsible behaviour (Shadow Study Summary E).

From Table 61, it is evident that Ms. Newton's pupils had somewhat negative perceptions of their teacher's attitudes toward them. According to items contained in the PCAS relationship with teacher factor, of the 28 pupils in Ms. Newton's class, 10 thought "My teacher likes me," and only three agreed that "Teacher is interested in me." There was a similar negative response to questions relating to interest in schoolwork (PCAS). On a more positive note, 13 pupils agreed that "My teacher is nice to me" -- "most of the time."

Also from Table 61, it is seen that pupil satisfaction with (MCI) and attitudes toward (PCAS) the class were generally positive. And attitudes toward student-instruction interaction (OSAT) were very positive. The results of these various instruments seem to support the view that, although Ms. Newton's pupils had generally positive feelings toward their class and their role as learners, they generally considered their teacher not to like them and they were not very interested in their schoolwork.

From her rank on the MTAI (74th percentile) it would appear that Ms. Newton would be reasonably successful in her interpersonal relationships with her pupils, and would be quite well satisfied with teaching as a vocation (Cook, Leeds, and Callis, 1951:3). As already noted, Ms. Newton claimed that she did in fact enjoy her work, and there is little clear evidence to refute her claim. As noted above, however, she did not appear to have captured the high regard or affection of her pupils.

| Instrument | Factor | | | Complete instrument | |
|---|---|---|---|---|---|
| | Title | Adele's score (max) | Class mean (SD) | Adele's score (max) | Class mean (SD) |
| MCI | satisfaction with the class | 21 (27) | 19.50 (5.20) | 99 (135) | 98.36 (7.89) |
| OSAT | student-instruction interaction | 63 (84) | 67.14 (3.60) | 87 (110) | 92.36 (5.83) |
| PCAS | interest in schoolwork | 6 (6) | 2.96 (1.57) | 79 (84) | 48.86(14.93) |
| | attitude to class | 14 (16) | 10.29 (4.28) | | |
| | relationship with teacher | 5 (6) | 2.43 (1.43) | | |

Table 61. Attitudes held by Ms. Newton's pupils, including Adele, toward selected class, instruction, and teacher factors.

This latter statement is contrary to expectations when Ms. Newton's scores on the 16 PF questionnaire are examined. Although she did not achieve an extreme score on any of the personality factors, she was rated as being very "happy-go-lucky" and very "tended minded", and yet these characteristics were not evident in her classroom behaviours as measured by any of the observation instruments or recorded in any anecdotal notes. Perhaps the 16 PF questionnaire provides an acceptable rationale for this apparent contradiction. In addition to the two factors already noted, Ms. Newton was very "suspicious", very "shrewd", very "apprehensive", and very "tense." In the demanding and somewhat threatening situation in which she found herself as a neophyte teacher, perhaps these characteristics assumed dominance over Ms. Newton's classroom behaviours. Other measures on the 16 PF showed her to be very "outgoing", very "self sufficient", and very "stable", but perhaps the emergence of her more socially positive behaviours was a question of time and the process of familiarization necessary for her to adapt to the role of a seasoned "teacher."

According to the TIBT (see Appendix G), Ms. Newton was primarily System 1 with traces of System 4. A System 1 person is:

> Characterized ... by a strong need for structure; rigid adherence to rules, authorities, and values which provide structure; and rejection of environmental inputs which are dissonant with the individual's organized modes of interpretation ... Other people must meet rigid standards of acceptability, operating in terms of the general behaviour principles of the subject (Harvey, 1974).

Ms. Newton's most notable characteristics as indicated by the auxiliary dimensions of the TIBT were her low scores for Externality and Cynicism. According to her score for Externality, she had a very low tendency to attribute success, failure, or control over her actions to forces over which she had little or no control. Her score for Cynicism indicated a very low expression of nihilism -- the belief that existence is meaningless and life has little value.

A deeper understanding of Ms. Newton's beliefs is obtained by an examination of some of her actual statements made in response to the TIBT. She believe, for example:

> People are basically good. People are not born good or bad but learn this through other people.... If they (people) do well for themselves, they do well for each other.
>
> Lying is learned. Most secure people do not have to lie.

> Friendship is a valuable necessary part of a person's life. Acquaintances come and go and are forgotten. One does not need a lot of friends.
>
> Students can talk back but 'back talk' such as sarcastic remarks, silly answers and dumb comments are not necessary ... Students should use their minds for better things.
>
> I am my own person with my own mind to make my own decisions. I am influenced by many things, but the final decision is up to me.

When taken in sum, these statements lend support to the picture of Ms. Newton as a conscientious, somewhat inflexible person who had very firm opinions concerning right and wrong and the way in which children should be treated. This summary is given some support by one observer who noted:

> This teacher does much that is good, but she lacks humour, 'personality', and evident warmth.... This teacher obviously plans and has clear ideas concerning what she is going to do for a given lesson, but I have not formed opinions concerning her depth of knowledge or understanding with regard to the various subjects ... What the teacher seems to need more than anything else is empathy (Anecdotal Notes E, 1).

But perhaps the most revealing comment concerning Ms. Newton's attitudes toward her pupils comes from her own statements. In an interview which included discussion of her class as a whole, Ms. Newton noted that her pupils were:

> Generally above average.... They are a very observant group of kids -- very quick, bright, thinking a lot (whether they think to their advantage all the time, I don't know). They are usually very good, believe it or not (Teacher Interview E, Part 1).

Later in the interview, when discussing her classroom policies, Ms. Newton said:

> It's too bad, but the kids aren't self-disciplined enough in a lot of ways.... It is fine if they are talking and moving around provided they are working, but if they aren't working (and they won't work if you give them that privilege), they just can't do it. The only way they will work is to sit in their

> desks and work, and the majority of times that is what I will insist upon (Teacher Interview E, Part 1).

Ms. Newton's distrust of the children's ability to behave in a satisfactory manner, and her repressive attitude toward the children was also noted by the Shadow Study observer:

> These are pleasant children -- enjoyable, friendly, helpful, cooperative ... but this behaviour is really evident only at recess on the field.... Teacher rarely smiles, never laughs; she often frowns or looks reprovingly. She stresses training, making the pupils repeat classroom management activities ... when they are poorly done. Yet pupils show responsible behaviour in general.... They could be allowed more freedom and self-direction (Shadow Study Summary E).

The next sections will examine Ms. Newton's goals, curriculum content, and classroom methods and policies in an attempt to explicate these in light of her personality and stated beliefs.

## Goals

Perhaps it is helpful to re-state that, at the time of this investigation, Ms. Newton was a young, beginning teacher. Apart from teaching practicum experiences as a student teacher, she had taught for only three months. All her experience as a teacher had been with the class under discussion, and she had replaced an experienced teacher who had had to retire from teaching on very short notice. Ms. Newton had, therefore, inherited several classroom and teaching procedures with which she may not have wholly agreed and which, though in conflict with her goals, she may not have felt capable of changing. Furthermore, Ms. Newton may not have had the experience nor opportunity to formulate clear statements concerning her goals, beliefs, and values related to teaching.

During an interview which focused on her class' characteristics, goals, curriculum, and classroom routines, Ms. Newton stated that she thought that she should provide her pupils with:

> A good learning environment and a lot of different kinds of experiences, mainly exposure to things they normally wouldn't know about otherwise (Teacher Interview E, Part 1).

Ms. Newton expanded on this statement, and her goals for her pupils have been extracted from various interviews held with her and summarised as follows:

Academic goals

- pupils should learn to read, write, and listen and to speak properly

Social goals

- to be capable of working independently
- to be capable of working in groups
- to learn self-discipline
- to make friends
- to communicate with many and various people
- to be capable of communicating 'about anything and everything'

In discussion, Ms. Newton explained that "communicating with a lot of different kinds of people" was her important goal. An example of the type of communications she advocated was the sharing of ideas and news that was a feature of opening exercises for her class each morning (although she considered hearing about "mother's birthday, grandfather's birthday" to be "a real waste of time"). She noted that communications were "very important, espeically when they (the pupils) get into later life -- the idea of being able to sell yourself and talk to people." Presumably it was in this context that "speaking properly" was regarded as particularly important.

When asked her opinion concerning the relative importance of cognitive and affective goals, Ms. Newton thought they should "go hand in hand." She saw the cognitive skills as a necessary means of broaching affective goals: "Can't have one without the other." Based on both academic and social goals, Ms. Newton considered that her class as a group were "average" in their achievement, although there were some outstandingly successful individuals, and some who were doing "very, very poorly."

Curriculum content and organization

Ms. Newton made it clear that although she had not devised her class timetable, she thought "the importance is where it should be", she "really liked it so ... didn't change it." Summaries of Ms. Newton's curriculum content and timetable organization are presented below:

Subjects

- language arts (Gates language experience program) and spelling
- mathematics
- social studies
- science (including an environment study and health)
- physical education
- music
- art
- library

Timetable example (6-day cycle)

| A.M. | | P.M. | |
|---|---|---|---|
| 8:40 | opening exercises | 12:35 | language arts or music |
| | math | 1:10 | language arts |
| 9:50 | RECESS | 1:45 | RECESS |
| 10:05 | language arts | 2:00 | physical education or art |
| 11:15 | LUNCH | 2:35 | science or social studies |
| | | 3:10 | SCHOOL OUT |

In Ms. Newton's opinion, "language experience should integrate a lot of different things into the reading program itself so, even though ... there are only three social (studies) periods, they (the pupils) will get a lot more social studies in the kinds of stories they read and the kinds of activities they do." She expressed some doubt over the number of mathematics lessons included in the timetable, thinking that perhaps there were too many. She agreed with this emphasis, however, and noted that (as with science) mathematics was important because it required logical thought.

Although she regarded science as important, Ms. Newton admitted "we don't get around to (it) very often." She had, however, set herself certain objectives which she felt it important to accomplish, but she did not think it necessary to conduct lessons on a regular basis provided that stated objectives were eventually achieved.

The overall curriculum which Ms. Newton used closely followed the school district's own guides which, in turn, adhered closely to provincial curriculum guides. Similarly, she used texts which had been previously ordered and used with her class before her arrival at Napier School. She found it necessary to supplement the mathematics text with her own ideas. But the language experience materials collected and prepared by the Westham district staff and available in Napier School she found excellent. Also, she found the school library to be an excellent source for researching materials for use with her class.

Ms. Newton was not entirely satisfied with her adopted curriculum and materials. When asked what changes she would like to make, she mentioned several. In mathematics for example, she would have preferred the Stanford Research Associates kit in place of the text she used. Also in mathematics, she would not have included division in grade three work, reserving it for inclusion in grade four. She would have liked to integrate drama and music with language arts. Art lessons would have been reduced from 70 minutes to 35 minutes, but increased to twice per week. She would have liked to have monthly field trips, with swimming and skating also included as part of the physical education program. Finally, Ms. Newton would have liked to have school begin at 8:00 a.m. and end at 2:00 p.m. in order to allow the children more activities after school, including staying at school for help with schoolwork.

When asked which of her preferred changes she could actually implement, Ms. Newton admitted there would be very few. She felt that a budget allowment would be of help in arranging field trips, but that many of her other suggestions would require more organizational time than she could possibly have. Also, she acknowledged that she did not think that she would ever be able to change the basic structure of her timetable, even though she admitted not strictly adhering to it in its present form.

### Instructional Methods and Policies

It is probable that, at the time of this study, Ms. Newton was still using some instructional methods and policies inherited from her predecessor, as well as developing her own preferred methods. Also, it is possible that, being a neophyte teacher, Ms. Newton found it desirable to control her pupils using methods which may have contradicted her goals and which she would have preferred not to use. The instructional methods and policies summarized below are drawn from Ms. Newton's statements made during various interviews, and from the notes of the classroom observers:

Methods

- teacher interacts with the whole class
- teacher interacts with two ability groups
- teacher assists individuals at her desk (usually) or at the pupil's desk
- material presented by teacher or read from text, followed by discussion, followed by "listening" lessons
- use of expressive activities (story writing and dramatizing)
- seatwork
- learning games (used as time-fillers)

Policies

- pupils sit in own desks to work
- occasional use of large work-table allowed
- group-work usually done seated with teacher on floor
- conversation generally not allowed
- free movement not allowed
- visits to bathroom discouraged and only allowed with teacher permission
- no visits to water fountain allowed during lesson time
- pupils form two single-sex lines to await permission to enter school
- pupils place heads on desks upon arrival in room, or while awaiting teacher instructions
- pupils sit quietly to await dismissal from classroom (by rows or sex)
- fighting and "tattling" not allowed
- to cope with deviant behaviours:
    - teacher may ignore the behaviour for a while
    - teacher "looks" at pupil or touches top of pupil's head
    - pupils may be required to correct and repeat a misbehaviour (e.g., leaving seats noisily)
    - pupils may be ordered to stand outside the classroom
    - class may be deprived of a physical education lesson
    - pupils may be detained after school
    - pupils may be sent to the principal for disciplining (including strapping)

Ms. Newton's usual modus operandi was to spend little time with whole class instruction, but to move quite quickly to group work. The class was divided into two groups based on ability. The "top" group

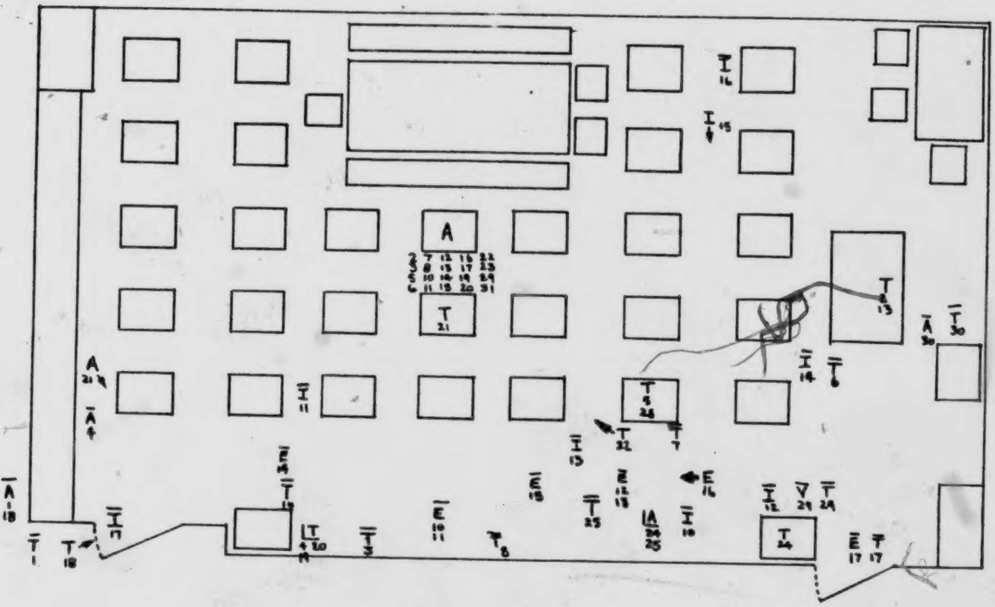
(Group One) comprised 12 pupils and occupied the three lines of desks closest to the windows. Group Two occupied the remaining desks, closer to Ms. Newton's desk (see Figure 28).

Group-work was usually conducted with the children seated on the floor as indicated in Figure 28. The children sat on the rubber-tiled floor with no special provisions for their comfort. When not called for group-work, the pupils were usually located in their desks for seatwork. Allocation to the groups seemed to be permanent and quite flexible.

Also from Figure 28, Ms. Newton's preferred classroom locations may be noted. Although the data are somewhat influenced by the presence of other adults in the course of the Shadow Study day, Ms. Newton's preference for occupying the strip of floor space between the chalkboard and front row of desks may be readily seen. It should also be noted, however, that she spent some time seated at pupil desks in order to give individual assistance.

Table 62 summarizes the locations of classroom occupants and visitors during the Shadow Study day. From Table 62 it is seen that students were generally located in their own desks or in their assigned floor spaces for group work. The data also confirm that there was little pupil movement about the room. Furthermore, pupils almost always sat in their own desks. The only movement of desks noted by the classroom observers was limited to one occasion when Ms. Newton required a boy to move his desk for class control purposes.

Little was observed in the nature of pupil expressive activities. Apart from music (which was taught by a specialist teacher), there was



KEY

A = Adele
T = Ms. Newton
E = External Proctor
I = Invigilator

T = Ms. Newton
A = Adele
$\overline{A}$ = Standing
←A = Walking
$\boxed{A}$ = In Desk

⌊A = Sitting on Floor
E = External Proctor
I = Invigilator
Subscripts = Locations in order of sampling.

Figure 28

Map of Ms. Newton's and Adele's classroom locations plotted every tenth minute throughout one day. (Shadow Study Notes E)

| Time samples in order | Locations of pupils (N = 25) | | | | | | Notes |
|---|---|---|---|---|---|---|---|
| | in own desks | in group places | moving to/ from desks | at window activities | standing about | out of room | |
| 1 | PRIOR TO ENTRY TO SCHOOL | | | | | 25$^a$ | Boys and girls lined up separately awaiting entry |
| 2 | 25$^a$ | | | | | | Opening exercises. Language arts. |
| 3 | 25$^a$ | | | | | | Six pupils in gp. 1 with heads on desks. |
| 4 | 9 | 9 (gp. 1) | 2 | 5$^a$ | | | |
| 5 | 24$^a$ | | | | 1 | | Music lesson with specialist in Room 6. |
| 6 | 25$^a$ | | | | | | |
| 7 | 24$^a$ | | | | | | |
| 8 | 24$^a$ | | 1 | | 1 | | |
| 9 | RECESS — ALL CHILDREN OUTSIDE | | | | | | Episodes #10-17: pupils write test given by external proctor. |
| 10 | 25$^a$ | | | | | | |
| 11 | 25$^a$ | | | | | | |
| 12 | 25$^a$ | | | | | | |
| 13 | 25$^a$ | | | | | | |
| 14 | 25$^a$ | | | | | | |
| 15 | 25$^a$ | | | | | | |
| 16 | 25$^a$ | | | | | | |
| 17 | 25$^a$ | | | | | | |
| 18 | LUNCHTIME -- PRIOR TO SCHOOL ENTRY | | | | | 25$^a$ | As for Episode #1 |
| 19 | 15$^a$ | 10 (gp.1) | | | | | Language arts |
| 20 | 14$^a$ | 10 (gp.1) | | 1 | | | |
| 21 | 14 | 10 (gp.1) | | 1$^a$ | | | |
| 22 | 21 | | | 1 | 3 | | Spelling test |
| 23 | 25$^a$ | | | | | | |
| 24 | 3 | 12 (gp.2)$^a$ | 8 | | 2 | | Whole class moving to floor for lesson on syllables |
| 25 | 12 | 12 (gp.2)$^a$ | | | 1 | | |
| 26 | CLASS AT PHYSICAL EDUCATION ON FIELD | | | | | 25$^a$ | Episodes #26-28: class mainly involved in field. |
| 27 | | | | | | 25$^a$ | |
| 29 | 24$^a$ | | 1 | | | | |
| 30 | 24 | | | | | 1$^a$ | Adele consulting with Ms. Newton. |
| 31 | 19$^a$ | | | 2 | | 4 | Preparing for dismissal: some pupils with heads on desks |

[a] location of Adele

[b] bracketted figure represents number of pupils in each identifiable group.

Table 62. Locations of pupils and Ms. Newton in Room 6 as sampled every tenth minute throughout one day (Shadow Study Notes E).

little evidence of pupil expressiveness either in a passing form (as in discussion, dramatics, poetry composition and reading) or in more permanent form (as in wall decorations and posted examples of pupil creative written work). One lesson activity recorded by a classroom observer was in contrast to Ms. Newton's usual lessons. The activity consisted of glueing paper to burned-out light bulbs in order to make rhythm shakers. The observer noted that:

> This was a free-moving lesson, with much less teacher direction (than usual). The teacher tends to become too embroiled and not sufficiently "withit" in this (type of) situation (Anecdotal Notes E, 1).

The learning games in Room 6 were limited in number and availability. Also, their use was restricted to the window shelf (see Figure 27, p.375). The games were used not so much as aids to learning as time-fillers for the occasions when pupils were not kept busy with group work or seatwork. Although Ms. Newton was not observed to use any mechanical or electrical aids, she did make some use of learning aids in a whole-class setting. On one occasion the activity consisted of using scissors and paper to cut out geometric shapes. A classroom observer noted that:

> (This) lesson was interesting and well-prepared. (It) began with an explanation of geometric shapes via question and answer discussion.... The lesson theme was developed via paper and scissors exercises (Anecdotal Notes E, 1).

On a second occasion Ms. Newton used a bag of marbles and posed the problem of weighing the marbles without the use of scales. This was a less successful lesson, and one girl asked permission for the class to lay their heads on their desks in order to help the thinking process. Ms. Newton gave her permission, although few pupils responded to it.

Ms. Newton's classroom policies, as outlined above, were generally observed. Although there were several incidents of individual deviant behaviours, the class as a whole was characterized by:

> A general orderliness and calmness ... that seems to hold throughout much of the day. This is not to say it is necessarily a totally 'good' environment for the children -- but a considerable amount of their behaviour seems to be on-task. Also, most of the children seem quite happy and content (Anecdotal Notes E, 1).
>
> The teacher rarely smiles, never laughs, often frowns or looks reprovingly. She stresses training, making the pupils repeat classroom management activities (e.g., leaving seats to sit on the floor) when they are 'poorly' done .... Yet the pupils show generally responsible behaviour when they leave their desks.... It seems that they could be allowed more freedom and self-direction (Shadow Study Summary E).

Other comments related to Ms. Newton's interactions with individual pupils. For example, one girl was ordered to stay in the classroom and complete unfinished seatwork while the rest of the class went on the field for physical education (Shadow Study E). On another occasion, during group work on the floor:

> The teacher sent Sean to his seat ... because of deviant behaviour which did not seem particularly bad.... (interacting with a neighbour), but which had not been effectively checked -- or noticed -- earlier. Sean retired to his seat, head on desk (Anecdotal Notes E, 1).

One of the negative aspects of pupils being reprimanded by being sent back to their desks was that they were then not allowed to participate in any instructional interactions. This not only resulted in lost learning opportunities, but frequently led to further deviant acts by the chastised pupil, who became frustrated by being denied legitimate interactions. This was a particularly frequent pattern of behaviour with one boy, a pattern which escalated to the point of him being dismissed from the room, and then ordered to the principal.

Ms. Newton's scores on the HIRS (see Appendix F) are almost certainly a reflection of her lack of teaching experience, and help provide a rationale for some of her classroom routines and her problems in classroom interactions. According to the HIRS, Ms. Newton was not highly rated on her classroom management skills -- she was particularly low on "overlappingness" (i.e., the ability to attend to more than one issue at a time). She was slightly more highly rated on her instructional skills, but she was rated very low on the interpersonal skills of warmth and empathy. Ms. Newton's lack of interpersonal skills was noted by the various classroom observers and has already been referred to.

In spite of the several negative comments made above concerning the affective climate in Room 6, it should also be noted that, in spite of her short term as teacher, Ms. Newton showed considerable knowledge of her pupils, their home lives, and their emotional problems. She also expressed concern for their social and emotional development, and she tried to take these factors into account in her teaching. A more detailed discussion of selected aspects of Ms. Newton's classroom methods and policies and their relationship to her curriculum plans and instructional goals will be presented in the next section.

## Discussion

An examination of Ms. Newton's goal statements, curriculum plans, and teaching strategies reveals some important contradictions. The possible reasons for the existence of these contradictions have already been alluded to in discussions concerning Ms. Newton's characteristics, youth, and limited experience as a teacher. The purpose of the present discussion is to examine the nature and effects of these contradictions on the events in Room 6 rather than solely to continue the discussion of Ms. Newton.

In making her goal statements, Ms. Newton said that "communicating about anything and everything" was probably the most important thing that "children should be getting out of school." When asked if she meant communications in the sense of language arts, Ms. Newton replied "No, just generally." But, while stressing the importance of communications in a general sense, Ms. Newton belittled pupil reports of such family events as birthdays, and considered them "a real waste of time." Such an evaluation seems to ignore the experiential value to the child giving the report. In any event, the number of verbal reports given by the children was usually limited to two or three during morning opening exercises. The reports did not seem to be especially prepared, nor were the pupils coached in their delivery skills: furthermore, the selection of pupils to report did not seem to be done on a systematic basis so as to include all pupils.

The other forms of communication which Ms. Newton was observed to include in her curriculum were through assigned written work, and through question and answer discussions, usually as a part of group work. Although she mentioned dramatics as an activity she thought important and worthy of inclusion in the learning activities for her pupils, Ms. Newton was not recorded as having taught or employed the use of dramatics during four weeks of intermittent but frequent and lengthy visits by the classroom observers. In fact, the very nature of the questions asked of pupils by Ms. Newton, and her manner of dealing with pupil responses seemed to curtail rather than promote communication in total class or group settings.

Neither was communication very much fostered in other kinds of settings. When not involved in total class or group instruction, pupils were usually assigned seatwork. There were few legitimate opportunities for pupils to interact in small groups or in incidental ways. The ban on conversation amongst pupils and on freedom of movement about the room was generally observed by the children with little apparent enforcement necessary on the part of Ms. Newton.

Making friends, another of Ms. Newton's goals, is perhaps closely related to being able to communicate. And yet Ms. Newton's instructional methods and classroom policies were not generally synergistic to this goal. Very few of the practices used by Ms. Newton, or the pupil activities acceptable to her, seemed likely to help children expand and deepen their friendships. Few assignments required interactive and cooperative pupil behaviours and, in any event, little had been done with the space, furnishings, or materials in Room 6 to facilitate pupil interaction. On one of the occasions when Ms. Newton brought the whole class to sit on the floor, she attempted to ensure that the children sat beside others they did not normally associate with:

> So that they're not always sitting beside the same person. Especially for something like a discussion, it's important that you sit next to different people (Stimulated Recall Interview E, 1).

Part of Ms. Newton's reasoning for this concern seemed to be related to her goal of encouraging wider friendships. Yet she thought it necessary to act "subtly" in moving children away from preferred classmates to other locations rather than share with them what she stated was an important educational goal.

According to Ms. Newton, she regarded cognitive and affective goals as of equal importance. Her main concerns in her curriculum plans and instructional methods seemed to be directed at achieving cognitive and managerial rather than affective results, however. An examination of detailed pre-instructional and stimulated recall interviews conducted with Ms. Newton in connection with two video-taped lessons supports this statement. The following recounting by Ms. Newton of a lesson episode typifies her reactions to many classroom situations. The lesson activity was in a whole class setting wherein the children were asked to answer Ms. Newton's questions related to various pictures which she held before them:

> (I asked) 'Which direction is the sun coming from?' She (a pupil) said, 'From the sky, it's coming from there.' I said 'Why?' because it wasn't the right answer. She said, 'Because the sun always comes from the sky.' I thought it was kind of a cute answer-- it was so obvious -- I would have said 'Right,' but she said the sun always comes from the sky -- she wasn't thinking this side of the picture, that side of the picture.... I wanted more -- that wasn't enough. (Stimulated Recall Interview E, 1)

Ms. Newton pursued the topic of the sun and, later in the interview she recounted:

> Oh, and the reason I asked Gayleen again -- I sort of laughed when she said, 'The sun.' And I thought, 'Oh, you never laugh at anyone.' But it was really cute, so I asked her again, hoping that if she gave me the right answer I could say 'That's really good.' But she didn't. She was participating and she was trying.

These particular lesson episodes illustrate some important aspects typical of Ms. Newton's interactive classroom behaviours, and which appeared to help frustrate her stated goals. In the first episode, for example, the pupil's response to Ms. Newton was not incorrect, but neither was it the answer she wanted. Although thinking the answer "cute", therefore, she refrained from giving praise or encouragement or even acknowledgement and shifted her attention to another pupil. If the pupil's answer was, in Ms. Newton's estimation, wrong -- then she had failed to communicate effectively. Thus, in this brief but typical episode, she had failed to promote her goals of the ability to communicate and of providing a good learning environment, and had in fact probably acted to the detriment of these goals.

In the second episode provided above, Ms. Newton extended the interaction in a negative manner. Of interest in this episode, however, is her obvious desire to find some way in which she could justify to herself offering praise to the pupil. Finally, however, she refrained from giving praise, and also ignored the opportunity to share the humour she obviously felt with the responding pupil and the class.

Still later in the stimulated recall interview, Ms. Newton recapitulated her thought process which followed soon after the two episodes reproduced above:

> I was thinking, 'What's wrong with you people today?' -- I was kind of getting mad . Not angry - mad, like I'd lost my patience, not that kind of mad. And also, like this is really a neat thing, maybe I'm doing it wrong. Maybe I should be asking different questions. I must be approaching it from the wrong angle. (Stimulated Recall Interview E, 1)

Two aspects of Ms. Newton's interactive thoughts are of interest here. First, she expressed an underlying sense of frustration which caused her to lose her patience and feel "mad." Her frustration was evident in her speech, facial expressions, and manner towards the children, and all of these outward signs undoubtedly served to depress the affective climate of Room 6. Such negative feelings as frustration, self-doubt, and distrust of pupils seemed often to underlie Ms. Newton's classroom behaviours. The second point of interest is Ms. Newton's recognition of the fact that she may have been in error in her selection of instructional strategies. Also evident in her recapitulation is her lack of experience from which to draw in order to make best decisions.

Ms. Newton's acknowledgement of her fallibility, and her evident willingness to consider alternatives are consistent with the results of her tests on the 16 PF and the TIBT. So, too, was her concern for pupil's feelings. Her chief failing as a beginning teacher was that she had not learned how to operationalize her goals through her teaching behaviours. During one interview, Ms. Newton was asked what she considered to be her most important tasks as a teacher. In reply, she mentioned that she thought that a teacher should be a consultant:

> For anything -- for any situation.... I would kind of hope that kids would be able to come and talk and ask questions. I would listen and interpret it the right way and be able to answer. I guess that would be kind of the most important (Teacher Interview E, Part 1).

Also during the same interview Ms. Newton said she thought it important for a teacher to be:

> Not an authoritarian sort of figure, but a respected figure. Not that you always have the last word, but unless you are respected, how are they ever going to listen to you? Like, I listen to them and they should listen to me, too. Unless you command a lot of respect -- which isn't achieved through yelling and screaming and a lot if disciplinary measures, but by them liking you -- then there is no point in them even being here because they aren't going to listen at all (Teacher Interview E, Part 1).

Unfortunately, at this early stage in her teaching career, Ms. Newton had not gained the ready confidence and respect of her pupils, nor their affection (as revealed by the attitude instruments reported on elsewhere in this chapter). In fact, in describing Ms. Newton's classroom after four weeks' of visitations, one classroom observer commented that:

> Phillip Jackson's 'affective desert' exists. This was made evident by Ms. Newton's lack of response to Derek's (a pupil) information that his family was moving the next day, therefore he would be leaving Napier School. By contrast, the music teacher, when given the same information, was interested, concerned, and friendly. It was also made evident by the lack of humour and pleasantness in the class. Any humour is pupil or visitor instigated, and Ms. Newton does not foster or promote it (Shadow Study Summary, E).

## The grade three pupil: Adele Unwin

### Influence of the home and attitude toward school

Adele was one of only two children in Ms. Newton's class who were actually born and brought up in Westham. At the time of this investigation, at eight years and four months, Adele was one of the youngest pupils in the class. She was quite tall for her age, slim, with long fair hair, light-complexioned, and in very good health. Although she had a pleasant smile, Adele's gamin-like features were often expressionless or somewhat sombre. She wore neat, good clothes with an air of youthful elegance. On the day of the Shadow Study, for example, she wore good leather shoes, wine-coloured corduroy pants, a Napier School tee-shirt, a white cardigan-sweater, and a green-and-white polka-dot headscarf.

Adele was the second in a family of three children, with a younger sister and an older brother (who was in grade six at Napier School). All the family lived at home where Mrs. Unwin was the fulltime home-maker.

Mr. Unwin was employed as a heating engineer (Blishen score of 34.38 -- class mean = 47.23, SD = 12.74). The Unwins gave "Protestant" as their religious affiliation. Neither Adele nor her older brother had attended kindergarten.

Mrs. Unwin had not graduated from high school, and Mr. Unwin had not completed grade ten. While acknowledging that at school Adele was doing "Not quite as well as most other children the same age," her parents considered that she would continue her formal education to complete high school graduation (PATES). Asked to comment on the kind of work they might expect Adele to do, her parents gave "Nurse" as their answer.

Adele's parents had generally positive attitudes toward education. According to their responses on the PATES, they "strongly agreed" that "Going to school is a profitable experience," and showed positive attitudes on almost all other questions related to teachers, school, and the value of education. They showed negative attitudes on only four of the 40 items contained in the questionnaire: for example, they "agreed" that "Many teachers don't explain enough in their teaching," and they "disagreed" that "Most teachers teach because they like children." Mrs. Unwin's concern for Adele's academic achievement and attitude toward school was illustrated by the comment she wrote on Adele's report card after having received the first grade three report in January, 1976:

> Am very upset with Adele's report. Would appreciate any help on your part in sending work home with her as we will give it an honest try here to help her and make her see that life isn't all play. If you have any suggestions please let us know (School Progress Report E).

But, according to the results of various attitude questionnaires administered to Adele in May, 1976 as part of this investigation, Adele's attitudes toward school and related factors were quite positive. From the MCI factor in Table 61 (see p. 380) it is seen that Adele was quite well satisfied with her class and achieved a score somewhat above the class mean. Adele agreed that "Some pupils don't like the class" and "Some pupils are not happy in class"; but she also agreed that "Most pupils are pleased with the class," "Most of the children in my class enjoy school," and "The class is fun" (MCI). The MCI results are supported by her score on the PCAS attitude to class factor. On this factor Adele achieved a score well above the class mean and, although showing uncertainty when asked to answer for the views of other children, was unequivocal in agreeing with statements such as "I shall be sorry to leave my class," and "I like being in my class" (PCAS).

Also from Table 61, it is seen that according to PCAS factors, Adele had a very high interest in her schoolwork (in fact, she was the only pupil in her class to achieve a maximum score on this factor). Similarly, on the relationship with teacher factor, Adele achieved the equal highest score in the class. For both factors, Adele's scores were very considerably above the class mean scores. Furthermore, Adele achieved the highest total PCAS score in her class, apparently indicating a very positive set of attitudes toward school-related factors. When asked which class she would rather be in at Napier School, Adele answered, "This one," and when asked why, she replied, "Because my school is fine" (PCAS).

Mrs. Unwin's report card comments, which appeared to suggest that Adele did not regard school seriously and was not interested in her schoolwork, seem contradictory to the results of the various attitude questionnaires. No explanation for this apparent contradiction is offered at this time, but an examination of the individual items of the PCAS relationship with teacher factor shows that whereas Adele agreed unequivocally that "I think my teacher likes me" and "Teacher gets on well with me", she was equally definite in denying that "Teacher is interested in me."

Adele's scores on the OSAT do not materially help in resolving the conflicting attitudes discussed thus far. Her total OSAT score indicates a mixed response to the school environment (Rivera, 1973: 20), and her score on the student-instruction interaction factor (Table 61) was one of the lowest in the class. An examination of the individual items on the OSAT shows that Adele chose the "happy" response for the two items asking how is your teacher and are your teachers with you in school. These items at least are consistent with her general responses on the other questionnaires. Her responses for 23 of the 29 items on the OSAT were "neutral." (It is perhaps important to note at this time that pupil responses are made on one of a series of four faces which represent a range of feelings. The "neutral" face probably best represents indifference.)

Further evidence of Adele's positive attitudes toward school is presented in Table 63. She achieved maximum scores on four of five school-related factors in Table 63, and for each of those four factors her scores were considerably above the class mean scores. Of particular interest is the low level of classroom anxiety (the lowest in the class) recorded by Adele (PCAS). Adele's response to each item on the OSAT general school attitude factor was "neutral." One of these items asks the pupil to predict the principal's attitude toward the respondent, but the remaining four factors enquire after the pupil's own feelings about "school", the "school building", the "noise" in the school, and "everything" in the school.

| Instrument | Factor | | | Complete instrument | |
|---|---|---|---|---|---|
| | Title | Adele's score (max) | Class mean (SD) | Adele's score (max) | Class mean (SD) |
| OSAT | general school attitude | 15 (20) | 15.36 (2.64) | 87[a] (110) | 92.36 (5.83) |
| SEI | attitude to home (parents) | 10 (16) | 10.50 (4.40) | 68 (100) | 66.14 (17.45) |
| | attitude to school (academic) | 16 (16) | 9.64 (4.49) | | |
| PCAS | attitude to school | 6 (6) | 2.93 (1.93) | 79 (84) | 48.86 (14.93) |
| | importance of doing well (school) | 10 (10) | 7.36 (1.87) | | |
| | anxiety in the classroom[b] | 6 (6) | 3.18 (1.44) | | |

[a] scores between 75 and 90 = mixed response to school (Rivera, 1973)

[b] high score = less anxious

Table 63. Attitudes of Adele and her classmates toward selected home and school factors.

Of the attitudes examined to this point, Adele's least positive was toward her home. From Table 63 Adele is seen to have achieved slightly below the class mean score on the SEI attitude to home factor. An examination of the individual items of this factor shows some inconsistency in Adele's responses. For example, she denied that "My parents usually consider my feelings; they usually worry about how I feel before we do things," but she also denied that "No one pays much attention to me at home." Similarly, she denied that "My parents expect too much of me; they expect me to do very hard things," but agreed that "I usually feel as if my parents are pushing me." She did agree, however, that "My parents understand me" and that "My parents and I have a lot of fun together."

In spite of the overwhelming evidence of positive attitudes toward school derived from Adele's responses to questionnaires, both Ms. Newton and her predecessor had low perceptions of Adele's attitudes toward schoolwork. On the School Progress Report in January, 1976, Adele's teacher noted that, although Adele "was cheerful and outgoing... readily helps with classroom chores," she did "not seem to be concerned enough about her work, but simply wants it finished." In March, Ms. Newton confirmed this criticism in noting that Adele's primary concern was for getting things done rather than for doing her work carefully and completely. When asked on May 28, 1976 to rate the usual reaction of her pupils to classroom activities, Ms. Newton described Adele as one of four children who were "uninterested" and added the comment that she "dislikes schoolwork." In June, 1976, however, Ms. Newton noted on the pupil report card that "Adele has put forth a good effort --

(which) she will have to continue in grade four." This positive comment perhaps indicated that indeed a change for the better had been effected in Adele's attitudes toward school since the January and March report periods.

The final evidence to be presented here concerning Adele's attitudes is extracted from the pupil interview following the Shadow Study. In the course of the interview, Adele was asked how she would feel if she never had to attend school again. She replied, "Not very good" and, in response to further questions, indicated that it was good to attend school "because you learn and you'd be so dumb if you didn't go to school." For the topics important to learn she listed:

> "How to spell something. How to say something. Learn your ABC's, your alphabet... math. And some songs and get fit -- some gymnastics. And that's all." (Pupil Interview E)

Asked if there were other things that one larned by coming to school, she answered simply, "Work."

In an attempt to pinpoint her feelings toward her school experiences, Adele was questioned as follows:

Interviewer: What makes you annoyed about school?

Adele: If we have to write a story -- a real long one -- we only get five minutes, and then it's homework.

Interviewer: What makes you bored?

Adele: Writing all the time.

Interviewer: Is there anything that makes you frustrated?

Adele: No.

Interviewer: That makes you mad?

Adele: No.

Interviewer: What makes you unhappy?

Adele: When I have to stay after school.

Interviewer: Anything else that makes you excited?

Adele: If we're going to go on a visit right now, or if we won a contest or something.

Interviewer: How often does that happen?

Adele: Not very often.

Interviewer: What makes you happy at school -- just plain, ordinary happy?

Adele: When we only get a bit of work.

Interviewer: Is there nothing that makes you happy at school, like knowing that you're going to meet your friends....? Does it make you happy when you have a film... when you have music and get to sing songs? What else like that makes you happy, maybe things that you do in this class with Ms. Newton?

Adele: Nothing else.

In summary, it must be admitted that it is extremely difficult to reconcile the many items of conflicting evidence concerning the influence of Adele's home on her role as a student, and on her attitudes toward school. Earlier in this chapter a case was made for describing Room 6 as an "affective desert" and for categorizing Ms. Newton as apparently lacking in humour, warmth, and empathy. Yet, in her written responses, Adele seemed very positive in her attitudes toward Ms. Newton, her class, and Napier School. These same attitudes were not nearly so strongly replicated, however, during an interview with Adele. It is possible that Adele rated school highly only in contrast to an unhappy home life, but there is little evidence that such was the case -- Adele's parents seemed to be caring and concerned for Adele's welfare. The next several sections of this chapter will examine various facets of Adele's classroom experiences, and further information will be presented to help in a fuller explication of Adele's school life.

## The social setting

At the time of this investigation, Adele's class comprised 13 boys and 15 girls. Adele was one of two pupils who had been born and brought up in Westham. Of the other children in Ms. Newton's class, 14 had been born in other towns and cities in Alberta, nine were from other Western provinces, two were from eastern provinces, and one had been born in England.

According to the occupation of their fathers, Ms. Newton's pupils came from a wide range of socio-economic backgorunds (Blishen scores ranged from 27.17 to 73.22, with a mean of 47.23). Occupations included public services, skilled trades, self-employed businesses and trades, and business management. Most mothers were fulltime homemakers, although a few worked (mostly as secretaries).

During an interview, Ms. Newton commented that she "really encouraged" the social development of her pupils. When asked how well her students were doing in this respect, Ms. Newton answered:

> They are doing quite well. They get along quite well with other people and they give and take as much as a lot of adult groups do (Teacher Interview E, Part 1).

Although Ms. Newton's experience of other classes of elementary pupils (especially at the grade three level) was extremely limited, support for this social assessment of her class is provided by a classroom observer who noted:

> These are pleasant children -- enjoyable, friendly, helpful, cooperative -- (although they) have the usual child-like failings of being loud, boisterous, and off-task at times. But this behaviour is really evident only outside the classroom (Shadow Study Summary E).

In fact, as noted earlier in this chapter, there was little planned or obviously sanctioned opportunity for social interaction amongst pupils during regular lessons conducted by Ms. Newton. Throughout the duration of this investigation, however, there were no recorded acts of physical conflict or harsh verbal abuse amongst the children, and only few acts of apparently deliberate unpleasantness (Anecdotal Notes E, 3 and 4).

In spite of the comments of Ms. Newton and the classroom observers, from the MCI factors in Table 64 it is seen that Ms. Newton's pupils perceived intra-class friction and competitiveness in appreciable and fairly consistent amounts. Twenty-six of 28 pupils agreed, for example, that "Some pupils don't like other pupils"; on the other hand, only five children agreed that "Children are always fighting with each other" (MCI).

An examination of the individual items of the competitiveness factor (MCI) indicates that Ms. Newton's pupils may have reflected the actual state of affairs within the class rather than an inordinate amount of competitiveness. Twenty-six of 28 pupils agreed that "Some pupils always try to do their work better than the others," and 23 agreed that "Some pupils always do better than the rest of the class," but these statements may reflect attitudes toward school work rather than intra-class competition.

Also among the MCI factors in Table 64, it may be noted that the class mean score for cohesiveness is closely comparable to those of the other factors. Although only 10 children agreed that "All pupils in my class are close friends" and "All of the pupils in my class like one another," all 28 pupils agreed that "Children in our class like each other as friends" (MCI). These generally positive attitudes toward the class are supported by the results of the interpersonal relations factor of the OSAT. An examination of the three individual items of this factor for all pupils revealed only one extreme negative response by one pupil, and six somewhat negative responses by a total of three pupils. All other responses (to such questions as "How are your classmates with you?") were either very positive or neutral.

| Instrument | Factor | | | | | Complete instrument | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Title | Adele's score | (max) | Class mean | (SD) | Adele's score | (max) | Class mean | (SD) |
| MCI | friction | 21 | (27) | 20.00 | (4.29) | 99 | (135) | 98.36 | (7.89) |
| | competitiveness | 25 | (27) | 22.64 | (3.25) | | | | |
| | cohesiveness | 19 | (27) | 22.07 | (2.10) | | | | |
| OSAT | interpersonal relations | 9 | (12) | 9.86 | (1.64) | 87 | (110) | 92.36 | (5.83) |
| SEI | social self-esteem | 8 | (16) | 11.21 | (3.31) | 68 | (100) | 66.14 | (17.45) |
| PCAS | social adjustment | 5 | (5) | 2.25 | (1.35) | 79 | (84) | 48.86 | (14.93) |

Table 64. Attitudes of Adele and her classmates toward selected factors related to the social setting of Room 6.

The SEI social self-esteem factor and the PCAS social adjustment factor (see Table 64) represent qualitatively different attitudes. Whereas the SEI factor indicates attitudes toward situations and people in general, the PCAS factor consists of school-related items. Thus the scores in Table 64 seem to indicate that, whereas Ms. Newton's pupils had reasonably high social self-esteem in their general social interactions, as far as their own class was concerned, their social adjustment was not good. This situation is illustrated by reference to specific items contained within these two factors. In the SEI item "I'm liked by kids my own age," only two pupils chose the "unlike me" response. For the PCAS item "I think the other children in my class like me," however, only seven pupils gave a sure "yes" response.

Further information concerning the social structure of Ms. Newton's class is presented in Figure 29. From this figure it is apparent that one boy (#3) and one girl (#25) were predominant in the number of first choices attracted on each of the three measures "who would you most like to sit near, work with, and play with." Two other girls (#8 and #16) also attracted first place choices from several other classmates. Only one boy and two girls did not attract any first place choices.

It is interesting to note that there were eight place choices which crossed between the sexes, and that six of these choices were made by four boys, and two choices were made by one girl. Also, Ms. Newton's classroom grouping practices notwithstanding, most sociometric choices seemed not to be so much dependent upon ability groups as upon seating proximity and other unidentified factors.

The apparently contradictory attitudes noted in earlier discussions concerning Adele (pp. 402-7) are also reflected in her social relationships. From Table 64 it is seen that Adele's scores on various attitude scale factors fluctuated quite widely on both sides of the class

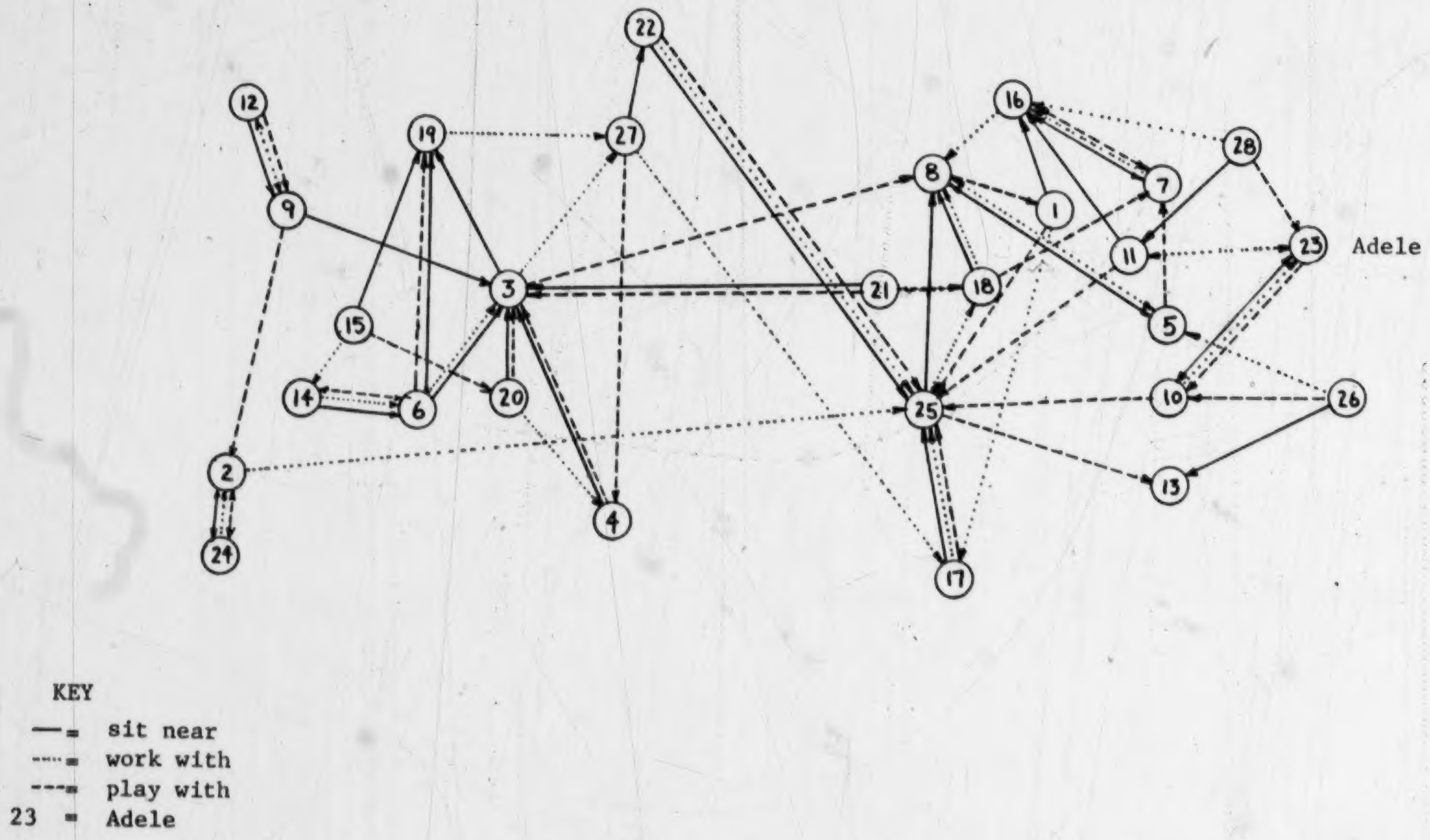

12
9
19
27
22
16
28
8
1
7
11
23
Adele
3
21
18
5
15
14
6
20
26
10
25
2
13
4
24
17
KEY
— = sit near
···· = work with
--- = play with
23 = Adele

Figure 29

Sociogram of Ms. Newton's
Grade Three Class based on first choices of three Measures

mean scores. On the MCI factors, for example, Adele's perception of friction within the class was quite close to the class mean score. Her perception of competitiveness was almost one standard deviation above the class mean score, and her perception of cohesiveness was more than one standard deviation below the class mean. These latter two scores are perhaps consistent in that the greater the perceived competition, the lesser the cohesion presumably one perceives. The scores, however, do lend support to the suggestion that Adele was something of an enigma in her class.

This assessment of Adele is supported by the results achieved on the remaining factors in Table 64. Adele's score on the OSAT interpersonal relations factor is very close to the class mean score. For the SEI social self-esteem factor, however, Adele's score dropped to almost one standard deviation below the class mean score, whereas in the PCAS social adjustment factor she achieved a maximum score -- more than two standard deviations above the class mean score.

A consideration of Adele's scores on various attitude factors reported on in Tables 63 and 64 seems to clarify one issue: whereas Adele was apprehensive and generally unsure of herself in social settings outside the school, within the context of her school and class she was quite positive and assured concerning her place and security. In this respect and on the basis of attitudes and perceptions reported on, she appears to have been quite different from the majority of her classmates.

In addition to the sociometric measures identified with Figure 29, Table 65 also summarizes Adele's social preferences and contacts as

| Information source | Classmates identified by ID number and sex | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 M | 10 F | 11 F | 13 F | 17 F | 18 F | 19 M | 20 M | 21 F | 25 F | 26 F | 27 M | 28 F |
| 1. sit near | | | | | | | | | | | | | |
| a written test | | 1st | | | | | | | | 3rd | | | 2nd |
| a pupil interview | | | | | 1st | | | | | 3rd | | 2nd | |
| a Shadow Study | | 1 | 1 | | | | | | 1 | | | | |
| b written test | | 1st | | | | | | | 3rd | | | | |
| b Shadow Study | | 1 | | | | | | | 1 | | | | |
| 2. work with | | | | | | | | | | | | | |
| a written test | | | 1st | | 2nd | | | | | 3rd | | | |
| a pupil interview | | | | | 1st | | | | | 3rd | | 2nd | |
| a Shadow Study | | | | | | | | 1 | | 1 | | | |
| b written test | | 1st | 1st | | | | | | | | 2nd | | |
| b Shadow Study | | | | | | | | | | | | | |
| 3. play with | | | | | | | | | | | | | |
| a written test | | 1st | | | | | | 2nd | | 3rd | | | |
| a pupil interview | | | | | 1st | | | | | 3rd | 2nd | | |
| b written test | | 2nd | 3rd | | | | | | | | | | 1st |
| 4. actually play with | | | | | | | | | | | | | |
| a written test | | 1st | | | | 2nd | | | | 3rd | | | |
| a pupil interview | | | 1st | | | | | 2nd | | | | | |
| a Shadow Study | 1 | 1 | | 1 | | | 1 | 1 | | | | | |
| b written test | | | | 1st | 2nd | | | | | 3rd | | | |
| b Shadow Study | | | | 2 | | | | 1 | | | | | 1 |

a = Adele's choice; b = chosen by classmates

Note: Ranking indicates order given (written test) or mentioned (interview). Cardinal numbers indicate number of times behaviours observed.

Table 65. Comparisons among the sociometric verbal tests, interview report of friends, and observed social interactions of Adele.

recorded via Shadow Study E and Pupil Interview E. From Table 65 it is seen that Adele's strongest interaction with a classmate at the time of this investigation was with Pam (pupil #10). Adele's selection of Pam on three of the four verbal tests was reciprocated by Pam on all four tests. The strength of the relationship was verified by the number and nature of the social contacts made during the Shadow Study day. Ironically, however, Pam's name was not one of those selected when the questions posed during the verbal test were repeated during the Pupil Interview. Adele was most consistent in selecting Tiffany (pupil #25) for a companion. Tiffany's reciprocal response was very weak, however, and during the course of the Shadow Study day the two were observed to interact only once -- at Adele's instigation.

In response to the OSAT item "How are your classmates with you?" Adele chose the neutral response. She also indicated in response to MCI items that her best friends were not in her class and that not everybody in her class was her friend. But, as seen from Table 65, Adele was not friendless and did not lack social contacts (especially in a classroom setting where such contacts were generally not purposely encouraged or facilitated by the teacher). For the measures included in Table 65, Adele made 10 contacts in the course of the Shadow Study time samples, and was herself contacted six times -- all interactions involving a total of nine classmates. In addition, another 11 brief but unclassified interactions between Adele and her classmates occurred, involving some of the children included above and two additional pupils.

According to items included in the PCAS, Adele had very positive perceptions of her social status in her class. She asserted that she "never" had no one to play with at recess, that she thought the other children in her class liked her, and that it was "false" to say that she had no frineds she liked very much in her class. Although she was not overtly friendly toward everybody in her class, and in spite of an almost habitual air of apparent aloofness, Adele's assessment of her social situation was generally supported by the classroom observers.

It is interesting to note from Table 65 and Figure 29 that Adele's chosen friends included both Pam and Tiffany. Pam was a poor student who "sulks" and was "uninterested" in classroom activities (Teacher Ranking E, Form B), and who attracted few social selections, except from Adele. Tiffany, however, was by far the most popular child in the class, a very competent and successful student who was "enthusiatic" concerning classroom activities and was "interested in life!" (Teacher Ranking E, Form B).

In spite of Adele's assertions that "I just don't play with boys" and "I don't like boys" (Pupil Interview E), she was observed to interact with six boys during the Shadow Study day, and actually selected one boy for two of the measures reported on in Table 65. In fact, during the Shadow Study day, Adele was observed in the company of Pan and another girl at recess time. The three girls, clearly led by Adele, approached two boys from their class in the sand-pit and attempted on several occasions to inveigle the boys into chasing them by scooping sand at the boys and running away. On this occasion, and during a class game of soccer, Adele showed a lively, playfully aggressive spirit.

Leadership was a facet of Adele's personality that was revealed on occasions other than that mentioned above. In response to the SEI item "Kids usually follow my ideas," Adele answered "like me". Although direct evidence of Adele's leadership qualities was sparse, she was observed to take it upon herself to organize the other girls in the line-up for entry into morning school (Shadow Study E). She did this by ordering the girls where and how to stand, sometimes physically pushing girls into place. On other occasions during the Shadow Study day, she was observed to tap Trent (seated close by) on the shoulder and lead him to the window games box and, later still, seemingly deliberately to ignore Leslie's (also seated close by) plea to "Come and play a game -- please?"

In summary, although she did not appear to solicit friends, Adele attracted the friendship of several of her classmates. And yet, although not appearing to need these friendships, they seemed to help provide her with security and assurance to the extent that she had very positive feelings toward her class as her preferred social milieu. In the classroom, she was not a particularly lively child, but in the school setting outside the classroom she became more animated and exuberant. Adele was a class leader in a general sense, but she did exert some control over other girls in situations where she chose to dominate. In brief, in her social relations Adele may be typically as independent and self-sufficient.

### Academic attributes, ability and achievement

During an interview conducted on May 11, 1976, Ms. Newton commented that the general ability range of her class was:

> Above average. There are obviously exceptions, but generally above average. They are a very observant group of kids -- very quick, bright, thinking a lot (whether they think to their advantage all the time, I don't know) (Teacher Interview E, Part 1).

Scholastically, she considered her class to be "average," although she admitted to having little or no experience of other grade three classes on which to base her judgement. Although she described the group as a whole as average, Ms. Newton recognized that there were individual children who "really shine forward, and some (who) are doing very, very poorly" (Teacher Interview E, Part 1).

Ms. Newton's assessment of the general academic attributes of her class received support from the results of the CLT, administered on 9 June, 1976, and summarized in Table 66. From Table 66, it is seen that the total DIQ mean score for Ms. Newton's class was 114.25 (SD = 13.68), with a range from 73 to 142. The nonverbal DIQ mean score was 3.29 points higher than the verbal DIQ, but the ranges of scores were very similar to the toal DIQ range.

In spite of higher scores on the non-verbal sections of the CLT, Ms. Newton's pupils achieved higher grade equivalent scores in reading than in mathematics on MAT Items administered in September 1975 (see Table 67). This advantage in favour of verbal over nonverbal scores was maintained throughout the grade three year, as evidenced by reference to the results of the MAT administered in June, 1976 (see Table 68), although larger gains were generally made in nonverbal test scores.

| Item | Adele | | Class (N = 28) | | |
|---|---|---|---|---|---|
| | value | rank[a] | mean score | (SD) | range |
| verbal D.I.Q. | 106 | 21st | 112.32 | (14.74) | 73 - 142 |
| age equivalent (months) | 105 | 25th (1) | | | 95 - 142 |
| grade equivalent | 3.7 | 24th (1) | | | 2.8 - 6.6 |
| nonverbal DIQ | 113 | 17th (1) | 115.61 | (14.59) | 73 - 146 |
| age equivalent (months) | 119 | 20th (1) | | | 84 - 163 |
| grade equivalent | 4.7 | 20th (1) | | | 2.3 - 8.2 |
| grade percentile | 83 | 20th (1) | | | 24 - 99 |
| total D.I.Q. | 110 | 18th (1) | 114.25 | (13.68) | 73 - 142 |

[a] figure in parentheses indicates number of classmates achieving rank equal to Adele's

Table 66. Adele's results and class rank, with class means, standard deviations, and ranges on selected items of the Canadian Lorge-Thorndike Intelligence Test (Level A, Form 1), June, 1976.

By further reference to Table 66, it is seen that Adele ranked 21st in her class on the DIQ verbal score, 17th on the nonverbal score, and 18th on the total score. She achieved a slightly lower class ranking for her scores on the MAT items administered in September, 1975 (see Table 67), perhaps indicating that she was close to achieving at the level that might be expected of her. At the end of the grade three year, however, Adele's MAT class rankings dropped to 26th for both total reading and total math scores (see Table 68).

| Item | Adele | | | Class | (N = 26) | |
|---|---|---|---|---|---|---|
| | std. score | rank[a] | grade equiv. | mean score (SD) | mean gr. equiv. | (SD) |
| word knowledge | 55 | 21st (1) | 2.8 | 64.92 (12.13) | 4.09 | (1.70) |
| word analysis | 58 | 16th (1) | 3.4 | 60.31 (6.26) | 3.81 | (0.81) |
| reading | 51 | 23rd (1) | 2.5 | 63.62 (11.0) | 3.83 | (1.32) |
| spelling | 55 | 19th | 2.7 | 62.62 (8.90) | 3.58 | (0.97) |
| total reading | 52 | 22nd (1) | 2.6 | 63.77 (12.34) | 3.96 | (1.58) |
| math computation | 48 | 21st | 2.3 | 58.15 (11.96) | 3.25 | (1.02) |
| math concepts | 53 | 19th | 2.7 | 61.42 (11.07) | 3.45 | (1.20) |
| math problems | 47 | 24th | 2.2 | 65.04 (14.73) | 3.74 | (1.38) |
| total math | 53 | 21st (1) | 2.4 | 64.19 (11.72) | 3.35 | (0.99) |

[a] figures in parentheses indicate number of classmates at equal rank

Table 67. Adele's standard scores, class rank, and grade equivalents with class means and standard deviations on selected items of the Metropolitan Achievement Test (Form F), September, 1975.

A comparison of the grade equivalent scores for Adele and the class mean scores (see Tables 67 and 68) shows that whereas the class mean improved by 1.07 for verbal scores and 1.35 for nonverbal scores, Adele's scores improved by only 0.8 and 0.7 respectively in the course of the grade three year. Clearly, Adele had not maintained pace with her classmates; apparently, nor had she achieved at a level which seemed to be suggested by her DIQ scores.

| Item | Adele | | | Class mean scores (N = 28) | | |
|---|---|---|---|---|---|---|
| | std. score | rank[a] | grade equiv. | mean score (SD) | mean gr. equiv. | (SD) |
| word knowledge | 67 | 18th (3) | 4.1 | 72.21 (10.02) | 4.93 | (1.38) |
| reading | 52 | 28th | 2.6 | 74.18 (12.87) | 5.20 | (1.76) |
| total reading | 60 | 26th (1) | 3.4 | 72.75 (11.29 | 5.03 | (1.50) |
| language | 60 | 19th (2) | 3.0 | 67.79 (13.59 | 4.04 | (1.58) |
| spelling | 65 | 26th | 3.7 | 74.07 (9.81) | 5.07 | (1.23) |
| math computation | 57 | 25th (1) | 3.1 | 68.07 (9.29) | 4.11 | (0.89) |
| math concepts | 59 | 27th | 3.1 | 76.86 (10.04) | 5.23 | (1.44) |
| math problems | 71 | 20th | 4.0 | 78.79 (13.59) | 5.09 | (1.55) |
| total math | 65 | 26th | 3.3 | 78.29 (10.42) | 4.69 | (1.45) |

[a] figures in parentheses indicate number of classmates at equal rank

Table 68. Adele's standard scores, class rank, and grade equivalents with class means and standard deviations on selected items of the Metropolitan Achievement Test (Form F), June, 1976.

Ms. Newton's perception of Adele's achievement in language arts and mathematics was obtained on 28 May, 1976 -- almost four weeks before the second MAT was administered, and is summarized in Table 69. A comparison between Tables 68 and 69 indicates that Ms. Newton was quite accurate in her assessment, although she seemed to have slightly higher expectations of Adele than was realized by the MAT scores.

Projected rank in class (N = 28)

| item | rank |
|---|---|
| language arts | 24th |
| math | 22nd |
| overall | 25th |

Table 69. Adele's rank in class according to Ms. Newton's perception of her students' achievements on selected measures, May, 1976.

Further information concerning Ms. Newton's perceptions of Adele are contained in Table 70. From Table 70 it appears that Adele achieved at a level either "far below" (language arts) or "below" (mathematics) than that expected of her by Ms. Newton, even though Ms. Newton regarded her as "below average" in academic ability. Apparently, Ms. Newton related this lack of achievement at least in part to Adele's undesirable attitudes. Again from Table 70, it is evident that Ms. Newton considered Adele to be "uninterested" in learning in the classroom situation.

Standardized tests, such as the MAT, may assess students on criteria which are not entirely relevant according to the teacher's goals and curriculum content. In order to assess Adele's academic accomplishments as judged by Ms. Newton on her criteria, an examination was made of Adele's School Progress Report. The report card evaluations are presented in Table 71 and include assessments for "achievement" and "effort" for all subjects taught in the curriculum. It should be noted that the Winter report was made by Ms. Newton's predecessor: Ms. Newton was responsible for the Summer report.

| Item | Placement of pupils on various 5-point scales (N = 28) | | | | |
|---|---|---|---|---|---|
| perceived achievement level cf expectations for LA | 2 greatly exceeded | 5 exceeded | 11 met | 8 below | 2 far below[a] |
| perceived achievement level cf expectations for Math | 4 greatly | 7 exceeded | 8 met | 6 below[a] | 3 far below |
| perceived attitude toward classroom teaching | 6 enthusiastic | 11 interested | 6 passive | 4 uninterested[a] | 1 resistant |
| assessment of academic ability | 6 very bright | 7 bright | 9 average | 5 below average[a] | 1 dull |

[a] indicates Adele's placement

Table 70. Ms. Newton's placement of her pupils on various 5-point scales according to her perceptions of them on selected measures, May, 1976.

From Table 71 it is seen that Adele's achievement in language arts and mathematics was consistently rated lower than the class mean, usually by at least one standard deviation. Furthermore, the low marks for "achievement" were accompanied by similarly low marks for "effort." Adele obviously improved in her "achievement" from the Winter to Summer reports -- the accurate interpretation of her scores is that from generally "needs to improve," she moved to "satisfactory." But the small amount of improvement in language arts "achievement" is particularly notable.

| Item | Max. score | Winter, 1975[a] | | | Summer, 1976 | | |
|---|---|---|---|---|---|---|---|
| | | Adele's total scores | class mean | (SD) | Adele's total scores | class mean | (SD) |
| group participation | 16.0 | 6.0 | 9.52 | (1.98) | 6.0 | 10.36 | (2.36) |
| individual participation | 16.0 | 8.0 | 10.38 | (1.89) | 6.0 | 10.82 | (2.29) |
| working skills | 12.0 | 3.0 | 7.11 | (2.14) | 4.5 | 7.55 | (2.07) |
| LA effort | 24.0 | 8.0 | 13.82 | (2.83) | 10.5 | 15.50 | (3.05) |
| LA achievement | 24.0 | 9.5 | 13.91 | (2.79) | 10.0 | 15.02 | (3.16) |
| Math effort | 4.0 | 1.0 | 2.30 | (0.75) | 2.0 | 2.88 | (0.83) |
| Math achievement | 4.0 | 1.0 | 2.80 | (1.05) | 2.0 | 2.89 | (0.99) |
| Science effort | 4.0 | 1.0 | 2.41 | (0.78) | 2.0 | 2.63 | (0.82) |
| Science achievement | 4.0 | 2.0 | 2.46 | (0.60) | 2.0 | 2.57 | (0.78) |
| S.S. effort | 4.0 | 1.0 | 2.33 | (0.68) | 2.0 | 2.31 | (0.76) |
| S.S. achievement | 4.0 | 1.0 | 2.50 | (0.71) | 1.5 | 2.80 | (0.67) |
| Art effort | 4.0 | 1.5 | | | 2.0 | | |
| Art achievement | 4.0 | 1.5 | | | 2.0 | | |
| Music[b] effort | 4.0 | 2.0 | | | 2.0 | | |
| Music achievement | 4.0 | 2.0 | | | 2.0 | | |
| P.E. effort | 4.0 | 1.0 | | | 2.0 | | |
| P.E. achievement | 4.0 | 2.0 | | | 2.0 | | |
| Printing/Handwriting effort | 4.0 | 1.0 | 2.30 | (0.71) | 1.0 | 2.65 | (0.77) |
| Printing/Handwriting achievement | 4.0 | 1.0 | 2.34 | (0.79) | 1.0 | 2.56 | (0.75) |

[a] the Winter report was made by Ms. Newton's predecessor

[b] taught by subject specialist

Note: total class scores were not available for some items

Table 71. Adele's scores for "effort" and "achievement", with class means and standard deviations, obtained from the School Progress Report .

From the data presented thus far in this section, there seems to be considerable consistency among the MAT scores (both September, 1975 and June, 1976), teacher assessments (both Ms. Newton's and her predecessor's), and Ms. Newton's perceptions compared with her expectations for Adele's academic achievement. One set of measurements which seems somewhat at odds with these assessments of academic ability and achievement is the assessment of academic attributes furnished by the CLT. In order to provide further insight into Adele's academic achievements and attitudes as perceived by her teachers, reproduced below are the comments entered into Adele's School Progress Report in January (by Ms. Newton's predecessor), March, and June, 1976:

> Adele is cheerful and outgoing. She really helps with classroom chores. I wish she would tackle her work with the same effort and enthusiasm. She does not seem to be concerned enough about her work, but simply wants it finished (January, 1976).
>
> Adele must take the responsibility for completing her work. She is capable of doing much better (March, 1976).
>
> Adele does not always listen attentively enough, particularly to lessons and directions. Adele's stories show a very low level of maturity.... She ... does not take the time to read carefully and think. The answers she writes often do not answer the questions at all. Her phonics are fairly good, but she has a very low knowledge of word structure.... Adele does fairly well on the weekly spelling tests; however, she makes many errors in her daily written work. A great improvement is needed in all areas of language arts if she is to be successful this year (January, 1976).
>
> Adele's primary concern is getting things done. She does not listen to classroom discussions or directions given and makes careless errors in written work. An improvement is needed should she hope to be successful this year (March, 1976).
>
> Adele has put forth a good effort (in language arts which) she will have to continue in grade four (June, 1976).

> Adele has an excellent understanding of measurement and fractions, however, many other areas cause problems for her. She does not think logically about the directions before she tries to do a question. She must become more confident about her basic facts.... Greater attention during lessons is also necessary (January, 1976).
>
> I can see little change in Adele's progress (March, 1976).
>
> Adele is working very hard in mathematics. She will have to continue to work hard in grade four if she hopes to do well (June, 1976).
>
> Adele was very competent in the estimation of distances (science). Her efforts toward the monthly nature projects need to be increased (January, 1976).
>
> Adele's work in science has been satisfactory (June, 1976).
>
> Adele seldom contributes orally and is often inattentive during (social studies) lessons. Her general knowledge and skills for social studies are quite weak (January, 1976).
>
> Adele has begun to contribute ideas to the class. She will have to learn to speak louder so everyone can hear (June, 1976).
>
> Adele must pay closer attention to directions so that her projects (in art) will be completed correctly (January, 1976).
>
> Adele does not show a great interest (in physical education), nor does she put forth enough effort (January, 1976).
>
> Adele did very well in the Canada (physical) fitness tests (June, 1976).
>
> Adele is not putting forth the needed effort in ... (printing/handwriting). Her main objective is to finish, and it doesn't seem to matter what her writing looks like. She can and must do better (January, 1976).

An examination of the report card comments reproduced above seems to indicate that Ms. Newton had a better impression of Adele's academic achievement and potential than was justified by the results of the most recent tests -- the MAT, administered in June, 1976. For example, in June, 1976, Ms. Newton reported that Adele had "put forth a good effort" in language arts,and that she was "working very hard in mathematics." She recommended promotion to grade four for Adele, with the expectation that continued hard work would guarantee reasonable success. Yet the results of the MAT in June, 1976 (see Table 68) indicated that, whereas the class as a whole was achieving at the grade four and grade five levels, Adele was achieving only at a low grade three level.

Ms. Newton's expectations for Adele were maintained seemingly in spite of perceived weaknesses in Adele's study habits and attitudes. Particularly in the January and March reports, both Ms. Newton and her predecessor commented on Adele's lack of concern for the quality of her work, lack of logical thought, inattention during lessons, and lack of participation in class discussions. Although the tenor of Ms. Newton's comments generally improved for the June report, Adele's academic performance as measured by the MAT (See Table 68) and as assessed and reported by Ms. Newton (see Table 71), did not seem to warrant the teacher's confidence.

It appears that Ms. Newton was judging Adele on qualities beyond those mentioned in this present discussion. It is possible that Ms. Newton's judgements were made on the basis of her knowledge of the MAT, September, 1975 scores (see Table 67), and on an intuitive assessment of Adele's academic attributes (see Table 66) rather than on Adele's actual performance.

Her low MAT marks and negative teacher reports notwithstanding, Adele's general self-esteem (SEI) was very close to the class mean score (see Table 72). Also from Table 72, her perception of the difficulty of schoolwork as measured by the MCI was lower than that of most of her classmates. But, most surprisingly in view of her low academic performance, Adele's academic self-image as measured by the PCAS was extremely high -- the highest and only maximum score in the class. The results of the items in Table 72 are consistent with Adele's generally very positive attitudes toward school reported on earlier in this chapter, but they totally contradict her actual academic achievements.

The reasons for this apparent contradiction are not clear. It is possible, of course, that Adele's attitude questionnaire responses did not reflect her actual attitudes -- that she did not make honestly felt responses. But it is also possible that the attitudes recorded were indeed those held by Adele who perhaps did not comprehend her low performance, or who perhaps developed such positive attitudes in defence against such low performance.

Adele was certainly aware of the high academic achievements of some of her classmates. During the pupil interview, for example, the following exchange took place:

> Investigator: Is there somebody that you listen to in particular in class ...?
>
> Adele: The teacher.
>
> Investigator: Anybody else?
>
> Adele: The substitute (teacher), or Kathy because she's the brightest girl in the class -- she knows most everything.
>
> Investigator: Doesn't Pam take any notice of you?
>
> Adele: I know more things than her.

Kathy was ranked as one of the brightest students in the class by Ms. Newton, and was ranked first in mathematics. Also, she achieved the highest score on the CLT with a DIQ of 142. Pam, on the other hand, was consistently ranked lower than Adele on almost all academic measures by both Ms. Newton and the results of standardized tests, and achieved a DIQ of only 97.

Both Ms. Newton and her predecessor made reference to Adele's inattentive and otherwise inappropriate classroom behaviour. The next section will deal with the classroom coping behaviours of Adele and her classmates.

| Instrument | Factor | | | Complete instrument | |
|---|---|---|---|---|---|
| | Title | Adele's score (max) | Class mean (SD) | Adele's score (max) | Class mean (SD) |
| MCI | difficulty | 13 (27) | 14.14 (3.04) | 99 (135) | 98.36 (7.89) |
| SEI | general self-esteem | 34 (52) | 34.79 (8.22) | 68 (100) | 66.14 (17.45) |
| PCAS | academic self-image | 18 (18) | 11.25 (3.56) | 79 (84) | 48.86 (14.93) |

Table 72. Attitudes of Adele and her classmates toward selected factors of self-esteem and perceived difficulty of schoolwork.

## Classroom coping behaviour

According to data collected during CASES observations and summarized in Table 73, the predominant style of behaviour of Ms. Newton's class in both language arts and mathematics was "conforming, passive, and submissive to directions" (Style H) in TD settings. The class also exhibited a considerable amount of "attentive, adult-oriented, and

| CASES coping styles | TD settings |  |  |  |  |  | NTD settings |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | LA |  | Math |  | Combined[a] |  | LA |  | Math |  | Combined[a] |  |
|  | score | vis% | score | vis% | score | vis% | score | vis% | score | vis% | score | vis% |
| A (aggressive, manipulative) |  | 0.0 |  | 0.0 |  | 0.0 |  | 0.0 |  | 0.0 |  | 0.0 |
| class $\overline{X}$ |  | 0.10 |  | 0.09 |  | 0.10 |  | 0.02 |  | 0.01 |  | 0.43 |
| S.D. |  | 0.20 |  | 0.36 |  | 0.19 |  | 0.06 |  | 0.05 |  | 0.08 |
| B (resistant, peer-oriented) | 1 | 0.07 | 1 | 0.08 | 4 | 0.14 | 3 | 0.13 | 1 | 0.11 | 8 | 0.16 |
| class $\overline{X}$ |  | 0.21 |  | 0.11 |  | 0.19 |  | 0.19 |  | 0.13 |  | 0.17 |
| S.D. |  | 0.21 |  | 0.17 |  | 0.15 |  | 0.16 |  | 0.18 |  | 0.14 |
| C (passive, dreamy) | 5 | 1.85 | 4 | 1.54 | 9 | 1.54 | 1 | 0.22 |  | 0.0 | 2 | 0.20 |
| class $\overline{X}$ |  | 0.60 |  | 0.45 |  | 0.69 |  | 0.42 |  | 0.67 |  | 0.52 |
| S.D. |  | 0.65 |  | 0.81 |  | 0.71 |  | 0.85 |  | 2.09 |  | 0.83 |
| D (distractible, peer-dependent) | 13 | 1.20 | 12 | 1.15 | 25 | 1.07 | 10 | 0.56 | 4 | 0.54 | 21 | 0.52 |
| class $\overline{X}$ |  | 0.45 |  | 0.24 |  | 0.45 |  | 0.52 |  | 0.45 |  | 0.49 |
| S.D. |  | 0.32 |  | 0.31 |  | 0.26 |  | 0.45 |  | 0.41 |  | 0.36 |
| E (attentive, adult-oriented) | 4 | 0.37 | 2 | 0.19 | 6 | 0.26 | 8 | 0.44 | 7 | 0.95 | 23 | 0.57 |
| class $\overline{X}$ |  | 0.99 |  | 0.55 |  | 0.92 |  | 0.19 |  | 0.25 |  | 0.20 |
| S.D. |  | 0.51 |  | 0.61 |  | 0.43 |  | 0.22 |  | 0.33 |  | 0.20 |
| F (assertive, task-oriented) |  | 0.0 |  | 0.0 |  | 0.0 | 1 | 0.06 |  | 0.0 | 12 | 0.30 |
| class $\overline{X}$ |  | 0.01 |  | 0.0 |  | 0.01 |  | 0.12 |  | 0.08 |  | 0.11 |
| S.D. |  | 0.02 |  | 0.92 |  | 0.02 |  | 0.19 |  | 0.12 |  | 0.11 |
| G (independent, on-task) |  | 0.0 | 2 | 0.11 | 2 | 0.05 | 67 | 2.13 | 20 | 1.54 | 130 | 1.83 |
| class $\overline{X}$ |  | 0.05 |  | 0.04 |  | 0.05 |  | 2.01 |  | 2.14 |  | 2.05 |
| S.D. |  | 0.08 |  | 0.07 |  | 0.06 |  | 0.52 |  | 0.54 |  | 0.44 |
| H (conforming, passive) | 31 | 1.91 | 31 | 1.99 | 71 | 2.02 |  | 0.0 | 5 | 0.45 | 7 | 0.11 |
| class $\overline{X}$ |  | 2.02 |  | 1.99 |  | 2.07 |  | 0.20 |  | 0.10 |  | 0.17 |
| S.D. |  | 0.29 |  | 1.04 |  | 0.21 |  | 0.25 |  | 0.17 |  | 0.18 |
| Overall CASES Coefficient |  | 4.02 |  | 4.15 |  | 4.14 |  | 7.02 |  | 6.62 |  | 7.01 |
| class $\overline{X}$ |  | 4.95 |  | 4.08 |  | 4.93 |  | 6.82 |  | 6.96 |  | 6.86 |
| S.D. |  | 0.48 |  | 1.96 |  | 0.44 |  | 0.97 |  | 1.08 |  | 0.81 |

[a] Combined total includes tallies from other subject areas

Note: underlining indicates behaviour is visible ( > 1.00)

Table 73. Behavioural styles of Adele and her classmates according to setting and subject matter (CASES E).

compliant" (Style E) behaviours in language arts TD settings, although these did not reach CASES visibility. In TD settings, Adele was also obviously "conforming, passive, and submissive to directions" (Style H) but her Style E behaviours were very little in evidence. As indicated in Table 73, however, she was one of six pupils who were "passive, withdrawn, avoidant and dreamy" (Style C) in both language arts and mathematics, and one of only two students who were obviously "peer-dependent, distractible, and off-task" (Style D) in both subjects.

In NTD settings, Ms. Newton's class was obviously "appropriately task-oriented, independent, and self-motivated" (Style G) in both language arts and mathematics. There were no other predominant class styles of behaviour, but in language arts three pupils exhibited visible levels of each of Style C and Style D behaviours. Adele's behaviours in NTD settings were similar to those of most of her classmates, although in mathematics she was one of very few pupils whose "attentive, adult-oriented, and compliant" (Style E) behaviours approached visibility.

In general, the class styles of behaviour reported by the CASES data are supported by the records of the classroom and Shadow Study observers. The observers noted that:

> The pupils seem happy, and work quite well much of the time. They have a reasonable degree of responsibility .... Today . . . the class worked solidly (for one hour) at mathematics problems in their texbooks. The teacher had little need or occasion to urge or reprimand, yet CASES coding shows little off-task behaviour (Anecdotal Notes E, 2).
>
> The pupils show responsible behaviour in general when they leave their desks . . . and use the materials by the window . . . . Pupils work quite well and fairly consistently. But the room today was stuffy . . . and pupils were quite often restless (Shadow Study Summary E).

> There is a general orderliness and calmness about this class that seems to hold throughout much of the day . . . a considerable amount of behaviour seems to be on-task (Anecdotal Notes E, 2).

The observers, on the other hand, also recorded incidents of inappropriate or undesirable class behaviours. They noted, for example, that on one occasion:

> Pupils sometimes had 'the giggles', gave 'smart' answers, or asked 'silly' questions (Anecdotal Notes E, 2).

But, while such inappropriate behaviour by the whole class was not often in evidence, some individuals in the class did exhibit unacceptable or inappropriate behaviours and were checked by Ms. Newton in class. In the case of one boy whose behaviour was frequently "resistant, passive aggressive, delaying, and peer-oriented" (Style B), Ms. Newton sometimes resorted to ordering him to move his seat, to stand outside the room, or to report to the principal.

Ms. Newton's perceptions of Adele's classroom behaviours were generally supported by the CASES data reported in Table 73. After a language arts lesson, for example, Ms. Newton categorized Adele as one of two students who were "pretty serious and . . . listening but . . . didn't say a lot (and) . . . didn't actively participate . . . " (Teacher Sort Task Interview E, 1). Later in the interview, Ms. Newton commented that Adele was "starting to try . . . to do very well in school . . . ." She hinted at recent improvements in Adele's study habits by noting that, although Adele "worked as hard as she could" and "her work was very well completed, she usually tends to rush through everything to get as much done as she can as quickly as she can . . . (but) today I noticed that she didn't just scrawl off any answer on the sheet. She read her directions, for example." (Teacher Sort Task Interview E, 1).

These apparent improvements in Adele's work were unfortunately counterbalanced by interview summaries of mixed and negative comments from Ms. Newton following other lessons. During another language arts lesson, for example, according to Ms. Newton, Adele was one of five pupils who:

> At the beginning (of the lesson) . . . just kind of sat . . . they were disruptive to the people around them. Their minds were on other things. They were talking and they weren't listening. Towards the end they gained interest. They did participate at some point. (Teacher Sort Task Interview E, 2).

Later in the same interview, Ms. Newton also categorized Adele as one of five pupils who:

> Didn't really participate one way or the other. They didn't say anything, they didn't listen. They did not really do anything. They didn't listen and they didn't take part at all (Teacher Sort Task Interview E, 2).

Ms. Newton also summarized Adele's classroom behaviours following a mathematics lesson. Again, Ms. Newton's comments were generally negative, but with positive undertones -- for example, Adele was one of six pupils who:

> Didn't really understand what they were supposed to be doing at first . . . they couldn't really think . . . and they got really frustrated. Then about half way through (the lesson) they kind of 'Oh, I know that' and took a real interest in what was going on (Teacher Sort Task Interview E, 3).

But, later during this interview, Ms. Newton also classified Adele as one of a group of students who, "When I handed out the papers, had to come and ask me a question or tell me something or comment on it." Adele's response had been to ask a "silly question" which Ms.

Newton ignored. (During an earlier interview -- Teacher Sort Task Interview E, 2 -- Ms. Newton made reference to Adele finding it necessary to fabricate an excuse to initiate private interactions with her. Ms. Newton apparently regarded the behaviour as "silly," and did not have an explanation for what motivated it.)

Although Adele's classrom behaviours were obviously much less than ideal, by reference to Table 73 it is seen that in TD settings the OCC mean scores for the whole class were quite low. In mathematics, Adele's score was close to the class mean score, but in language arts Adele's OCC score was almost two standard deviations lower than the class mean. In NTD settings, Adele's OCC scores for both language arts and mathematics were quite close to the class mean scores, and all NTD scores for Adele and her classmates were considerably higher than TD scores.

The contrast between Adele's behaviours in TD compared with NTD settings is made more apparent when the CASES data are classified broadly as in Table 74. From Table 74, it is seen that in TD settings Adele's most visible type of behaviour was classified as inappropriate in language arts and mathematics (the overall score for desirable behaviour increased slightly when "other subjects" were included in the data).

In NTD settings, however, Adele's behaviour was classified as visibly desirable in both language arts and mathematics. Her inappropriate behaviours also became visible in both subjects, but to a much lesser extent than in TD settings. She exhibited almost no unacceptable behaviours at all. Overall, in both TD and NTD settings in all subjects, Adele's behaviour was visibly inappropriate, slightly below visibility

| Behaviour classification | TD settings | | | | | | NTD settings | | | | | | Both settings | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LA | | Math | | Combined[d] | | LA | | Math | | Combined[d] | | LA | | Math | | Combined[d] | |
| | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis % | score | vis% |
| desirable[a] | 35 | 64.81 | 35 | 67.31 | 79 | 67.51 | 76 | 84.44 | 32 | 86.49 | 172 | 84.73 | 111 | 77.08 | 67 | 75.28 | 251 | 78.44 |
| inappropriate[b] | 19 | 35.19 | 17 | 32.69 | 37 | 31.66 | 14 | 15.56 | 5 | 13.51 | 30 | 14.78 | 33 | 22.92 | 22 | 24.72 | 67 | 20.94 |
| unacceptable[c] | | | | | 1 | 0.84 | | | | | 1 | 0.49 | | | | | 2 | 0.63 |
| total | 54 | | 52 | | 117 | | 90 | | 37 | | 203 | | 144 | | 89 | | 320 | |

[a] visible at 80%

[b] visible at 10 - 15%

[c] visible at 3%

[d] includes tallies from other subjects

Table 74. Classification of Adele's behaviour according to subject and setting (CASES E).

in being desirable, and only very slightly (and not at all visibly) unacceptable. This interpretation of Adele's classroom behaviours is generally supported by Ms. Newton's comments presented earlier in this chapter. To help further explicate Adele's behaviour, an examination of the Shadow Study data is presented below.

The Shadow Study data is limited to observations made throughout only one day. Although the data do not in themselves justify generalizations beyond that day, some indication of the typicality of the Shadow Study observations is presented in Table 75. From Table 75, it is seen that during the Shadow Study day Adele's desirable and inappropriate behaviours were both classified as being visible. Also from Table 75, the summarized CASES data show Adele's inappropriate behaviours to be similarly visible, but her desirable behaviours to be slightly less than visible. Both sets of data agree that Adele's unacceptable behaviours were very slight to nonexistent. From Table 75, it seems justifiable to assume that the behaviours observed during the Shadow Study day were slightly more positive than usual for Adele, but not far removed from her typical behaviours. It might also be inferred that these more positive behaviours were part of a favourable trend in Adele's pattern of classroom behaviour, as noted by Ms. Newton and commented on earlier in this chapter.

From Figure 28 (see p. 390), it is seen that during the Shadow Study day Adele spent 80 percent of her time in her own seat, eight percent sitting on the floor in her group, eight percent standing at the window games area, and four percent interacting privately with Ms. Newton at her desk. The detail of Adele's classroom behaviour is perhaps best typified by the following excerpts from the specimen descriptions recorded by the Shadow Study observer:

> 9:05 a.m. Adele now in her seat .. . she has asked Derek W. for the page in the textbook, which she opens at the correct page. Hums briefly and quietly then looks at Ms. Newton as the teacher asks the class a question concerning the text, raises her hand halfway, but lowers it and pokes through the book as Ms. Newton continues calling upon pupils by name to answer a question.
>
> 9:15 a.m. Adele in her seat ... she has reacted with interest and enthusiasm to the music teacher, She joins in vigorously and properly to the actions required to give the beat, as instructed by the teacher. She vocalizes the 'taa-ti' as given by the teacher. She seems to accept the challenge to make proper notations on her worksheet... she really focuses on her own work.
>
> 9:35 a.m. Adele in her seat ... now erasing a wrong answer in order to write in the correct answer . . giving herself checkmarks. When the music teacher asked for those who got all correct answers, Adele raised her hand (but this is not true). Hand up high, Adele looks around ... her face is deadpan.
>
> 10:07 a.m. Adele in her seat ... listening to external proctor's explanation (for MAT administration). When instructed to look at the test booklet, Adele complies. Pupils ask questions, and she attends ... looks at booklet, then at the proctor. She is interested and cooperative.
>
> 12:25 p.m. Adele in her seat and has taken out her textbook. . . . She contemplates the book, is undecided, and turns another page . . . . She stares at the group seated on the floor, then settles to understand her textbook and begins to write in her workbook.
>
> 12:45 p.m. Adele in her seat, looking at the Group One pupils . . . . She . . . is sitting very straight, examining her nails . . . gazing out the window. She is not greatly motivated to concentrate on her desk work. She is easily distracted, somewhat restless . . . .
>
> 12:55 p.m. Adele is standing by the window, having gone to the work filebox. She uses a learning game and dice on the ledge. She is distracted when Ms. Newton calls to other pupils because of deviant behaviour . . . her attention is divided between the learning game and Ms. Newton's activities.

1:35 p.m. Adele is sitting with Group Two on the floor, looking at Ms. Newton, then she leans over to interact with Gayleen. She is then distracted to look at other girls sharpening their pencils. Gayleen whispers to Adele, who looks around and then at her nails.

2:05 p.m. Adele is in her class soccer game (physical education on the field) vigorously chasing the ball, showing speed and some natural skill in kicking. She is enthusiastic and energetic . . . . She chases and tackles boys as well as girls.

2:45 p.m. Adele is sitting with her group on the floor in front of Ms. Newton. She is attending to the teacher's explanation of a bluebell's appearance and habitat . . . . Adele gazes at Ms. Newton most of the time . . . she seems very interested and attentive.

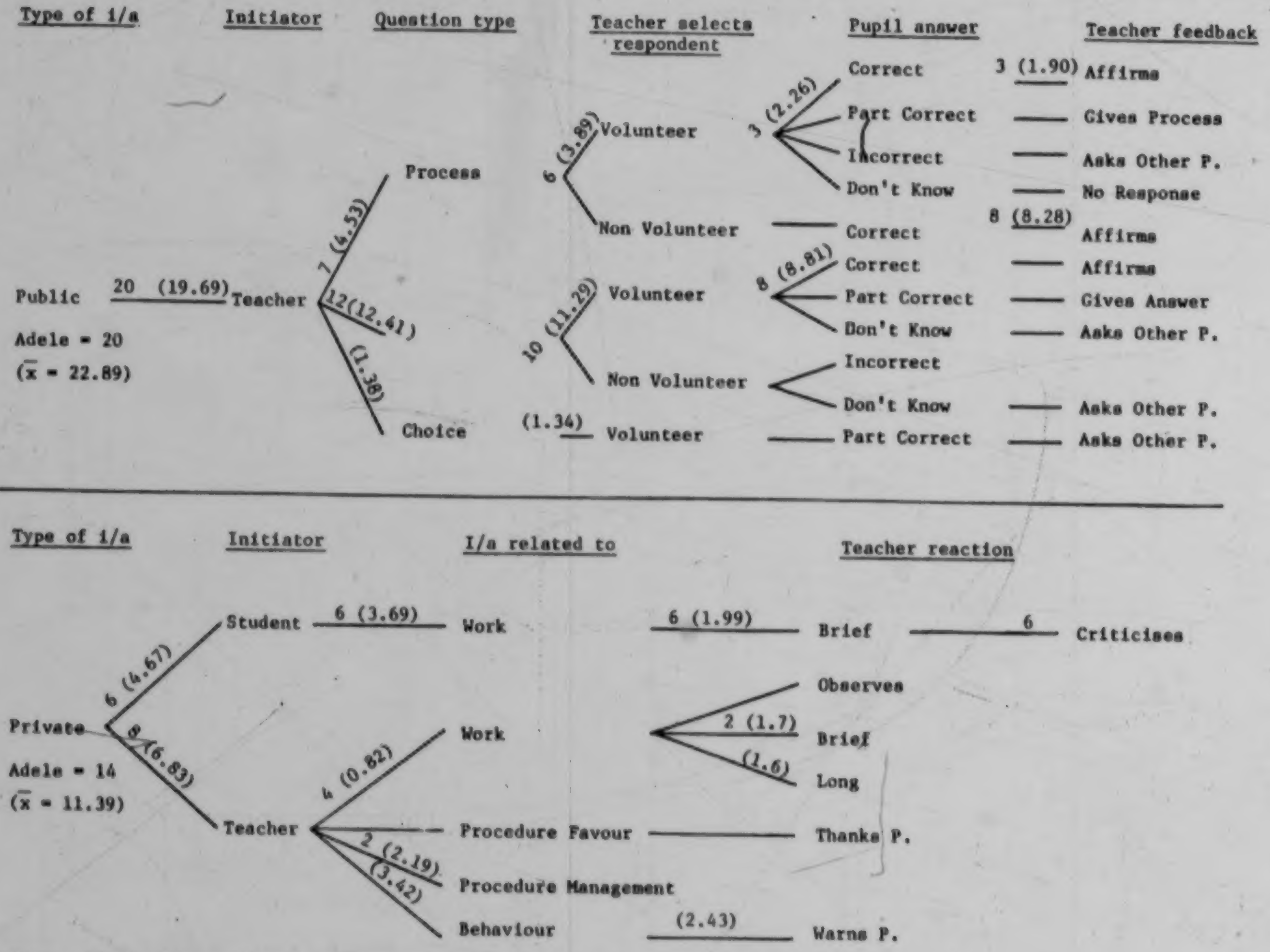
| Behaviour classification | Threshold visibility % | CASES data % | Shadow Study % |
|---|---|---|---|
| desirable | 80 | 78.44 | 81.72 |
| inappropriate | 10 - 15 | 20.94 | 18.28 |
| unacceptable | 3 | 0.63 | |

Table 75. Classification of Adele's behaviour according to actual CASES data, and a CASES analysis of the Shadow Study specimen record data.

From the specimen descriptions recorded above, it is clear that Adele exhibited generally desirable behaviours, but with a significant amount of inappropriate behaviours. Again, these descriptions support the CASES data reported on earlier.

During a further interview, Ms. Newton mentioned her perceptions of aspects of Adele's behaviours which have not yet been mentioned. These behaviours did not occur during the Shadow Study day, nor were they noted by the classroom observers, but it seems important to mention them at this time since they were behaviours which registered with Ms. Newton. During the interview (which followed a mathematic lesson), Ms. Newton recalled that Adele was one of a few students who audibly muttered "Huh?" after class instructions had been given. Ms. Newton commented that the students in question "were going 'Huh?' and I can't stand it when they do that" (Stimulated Recall Interview E, 2). Later in the same interview, Ms. Newton named Adele as one of a number of students who interrupted teacher conversations with other pupils because "(they don't) have any patience ... everything has to be done right now" (Stimulated Recall Interview E, 2). In recounting these incidents, Ms. Newton expressed annoyance which may be related to attitudes held by Ms. Newton specifically towards Adele.

According to the DICOS data, in 10 language arts lessons, Ms. Newton interacted with individual students in public twice as often as she did in private (see Figure 30). Most often Ms. Newton initiated the interactions, the majority of which were product questions for which the selected volunteer respondents who usually answered correctly. Ms. Newton typically affirmed these answers. Of public dyadic interactions,


Type of i/a
Initiator
Question type
Teacher selects respondent
Pupil answer
Teacher feedback
Public
20 (19.69)
Adele = 20
($\bar{x}$ = 22.89)
Teacher
7 (4.53)
12(12.41)
(1.38)
Process
Choice
6 (3.89)
Volunteer
Non Volunteer
10 (11.29)
Volunteer
Non Volunteer
(1.34)
Volunteer
3 (2.26)
Correct
Part Correct
Incorrect
Don't Know
Correct
8 (8.81)
Correct
Part Correct
Don't Know
Incorrect
Don't Know
Part Correct
3 (1.90)
Affirms
Gives Process
Asks Other P.
No Response
8 (8.28)
Affirms
Affirms
Gives Answer
Asks Other P.
Asks Other P.
Asks Other P.
Type of i/a
Initiator
I/a related to
Teacher reaction
Private
Adele = 14
($\bar{x}$ = 11.39)
6 (4.67)
8 (6.83)
Student
6 (3.69)
Work
6 (1.99)
Brief
6
Criticises
Teacher
4 (0.82)
Work
Observes
2 (1.7)
Brief
(1.6)
Long
Procedure Favour
Thanks P.
2 (2.19)
(3.42)
Procedure Management
Behaviour
(2.43)
Warns P.

Note: links with no figure showing represent N = 1. Class mean < 1.00 not shown.

Figure 30. Nature of the public (class N = 638) and private (class N = 319) interactions between Adele and Ms. Newton in 10 language arts lessons (DICOS E).

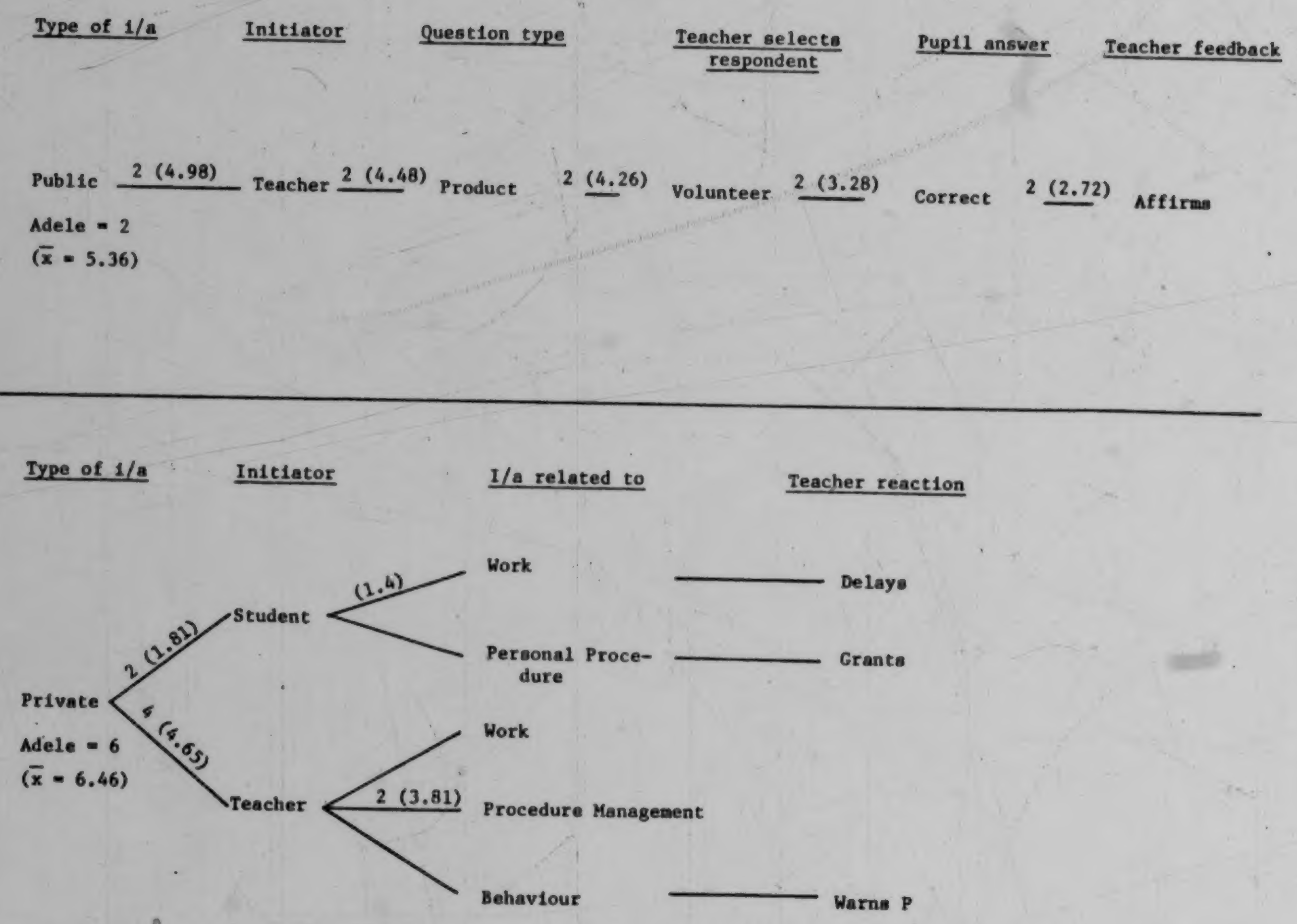
the second most frequently occurring pattern was for Ms. Newton to ask process questions for which she selected a volunteer respondent who answered correctly. One significant result of this pattern of interactions was a teacher-centred lecture and/or question-answer type of lesson: very teacher dominated.

Adele's public dyadic interactions with Ms. Newton were similar to those of many of her classmates. All 20 (class mean = 22.89) of Adele's public dyadic interactions were teacher-initiated, from which point they followed the paths outlined in Figure 30.

The frequency of Adele's private interactions was again similar to the class average. All six (class mean = 3.69) of private dyadic interactions initiated by Adele were work-related and resulted in criticism from Ms. Newton. Of the eight (class mean = 6.83) interactions initiated by Ms. Newton, four were work-related. Only one (class mean = 3.42) of Adele's private teacher-initiated interactions was behaviour-related, and it resulted in a warning.

In three mathematics lessons, Adele's pattern of public dyadic interactions with Ms. Newton followed the dominant path established for the class as a whole (see Figure 31). Adele interacted twice publicly (class mean = 5.26), with Ms. Newton the initiator both times (class mean = 4.98). On both occasions, a product question resulted in a volunteered answer which was selected by Ms. Newton -- Adele's answers were correct, and affirmed by Ms. Newton.

Of six (class mean = 6.46) private dyadic interactions, Ms. Newton initiated 4 (class mean = 4.65) and Adele initiated two (class mean = 1.8). Work-related questions dominated the student-initiated


Type of i/a
Initiator
Question type
Teacher selects respondent
Pupil answer
Teacher feedback
Public
2 (4.98)
Teacher
2 (4.48)
Product
2 (4.26)
Volunteer
2 (3.28)
Correct
2 (2.72)
Affirms
Adele = 2
(x̄ = 5.36)
Type of i/a
Initiator
I/a related to
Teacher reaction
Private
Adele = 6
(x̄ = 6.46)
2 (1.81)
Student
4 (4.65)
Teacher
(1.4)
Work
Personal Procedure
Delays
Grants
Work
2 (3.81)
Procedure Management
Behaviour
Warns P

Note: Links with no figure showing represent N = 1. Class means < 1.00 not shown.

Figure 34. Nature of the public (class N = 150) and private (class N = 181) interactions between Adele and Ms. Newton in three mathematics lessons (DICOS E).

interactions, and procedure management topics dominated the teacher-initiated interactions.

In view of what has been said to this point concerning Ms. Newton's views of Adele and the nature of her interactions with Adele, it is not surprising to learn from one of the teacher interviews that Adele was the first student selected by Ms. Newton as the one she would be least prepared to talk about should a parent drop in unannounced. According to Silberman (1969), Ms. Newton's attitude toward Adele should be classified as "indifferent." In elaborating on her choice of Adele, Ms. Newton explained:

> Because I'm not quite sure what I'm going to do with her next year, like pass her on probation or just pass her. I wouldn't quite know what to say to her parents. I'm just not sure yet. I'm not sure what she knows and what she just isn't doing (Teacher Interview E, Part 2).

In summary, Adele could hardly be described as a "good" student, on the other hand she was not particularly troublesome or disruptive. She did not interact a great deal with her classmates during classtime, yet her interactions were frequently off-task. Although she was obviously inattentive at times, for much of the time she seemed to be attending and on-task. It is difficult to ascribe motives or a rationale for Adele's behaviour because she was so frequently expressionless and noncommittal. Whereas at recess she was typically very lively and socially active, in the classroom she often seemed to exist within a cocoon -- impervious to external events even while registering their occurrence.

## Discussion

The discussion presented here will focus on salient points contained in the previous sections and which seem to have special significance for Adele's life as a school pupil. Where appropriate, cause and effect relationships among the factors brought into the discussion will be suggested. Finally, evaluative comments will be made concerning the formal education experienced by Adele.

The factors which apparently bear on Adele's school experiences form a complex network. For the purposes of this discussion these factors will be grouped to deal with Adele's social relationships, her relations with her teacher -- Ms. Newton, and her academic status.

According to her written responses to several questionnaires, Adele had very positive attitudes toward her class, and she was socially well adjusted (Tables 61 and 64). In response to questions and discussion during the pupil interview, however, Adele indicated that she felt that the value of school was related to preparation for the world of work rather than to the immediate pleasure to be obtained there. When asked what bored her at school, she answered "Work." And when asked what at school made her happy, she replied "When we only get a bit of work" (Pupil Interview E). These verbal responses do not support the very strong, positive responses recorded on the questionnaire factors.

In fact, Adele achieved very low scores for her perceptions of her interpersonal relations with her peers, and her social self-esteem (Table 64). Furthermore, she perceived much competitiveness and friction in her class, and her perception of group cohesiveness amongst her classmates as a social group was considerably lower than that of her classmates (Table 64). This is not to imply that Adele was a social outcast or was even isolated at school, but neither did she enjoy great popularity or an evident warm relationship with her classmates as a whole.

Adele's social contacts were actually quite limited. Although she expressed friendship for Kathy, one of the highest achievers in Room 6, Kathy did not return the compliment and the two actually interacted very little. Adele's most constant companion was in fact Pam, an overweight girl who often invoked Ms. Newton's annoyance and who was one of the very lowest achievers in the class. In Pam's company especially, but also in the company of some other classmates, Adele was a leader. In her play, she was physically vigorous and seemed to derive much enjoyment from such activities as soccer and being chased by boys. Perhaps school provided positive experiences for Adele in the opportunities it offered for play and leadership rather than the academic work offered. Adele's positive attitudes toward her class and Napier School could have been a reflection of positive attitudes related to play rather than to the actual learning activities or interactions of the classroom. It is evident that there are contradictions in her testimony and in her behaviours. Further evidence than has been obtained in this study seems necessary in order to make more conclusive statements.

The major factors concerning Adele's relationship with Ms. Newton also appear to be inconclusive. According to written questionnaires, Adele had very positive attitudes toward Ms. Newton. Furthermore, she felt much less anxious than her classmates in the classroom situation (Table 61). In spite of Adele's expressed positive attitudes, however, Ms. Newton's attitude toward Adele as determined by Silberman's (1969) four questions was one of indifference (Teacher Interview E, Part 2).

According to Silberman (1969), students toward whom teachers feel indifferent receive less contact and less positive evaluation from teachers than do other students. Furthermore, teacher-initiated contacts are brief and perfunctory. Finally, teachers seem unmindful of the presence of students toward whom they are indifferent. The relationship between Ms. Newton and Adele, while characterized by some of Silberman's criteria, did not fully fit his description of indifference. For example, although the contacts with Adele initiated by Ms. Newton were frequently brief and ended with criticism or warning, the number of these contacts was only slightly less than the average for the class as a whole (Figures 30 and 31). Whether Adele sensed indifference on the part of Ms. Newton is not clear, although Silberman's findings indicated that pupils were generally accurately aware of such teacher attitudes. What seems difficult to explain in this situation is why Adele maintained stated positive feelings toward Ms. Newton while Ms. Newton's attitude to Adele was one of indifference. It is possible, however, that if Room 6 was the "affective desert" which it appeared to be to at least one observer, then Ms. Newton's behaviours toward Adele (indifferent though they were), were not dissimilar to her overt behaviours toward pupils generally. In such a situation, Adele may not have perceived Ms. Newton's indifference being particularly applicable to her.

Adele's classroom behaviours were often visibly desirable, but were also visibly inappropriate for much of the time (Tables 73, 74, and 75). Her behaviours did not complement the very positive attitudes toward her teacher or her class that her written responses indicated. Also, her classroom behaviours, although seldom unacceptable, if detected by Ms. Newton would have given cause for annoyance and censure rather than indifference. In fact, Ms. Newton perceived Adele to be uninterested in the classroom teaching/learning situation (Table 70). This perceived attitude of uninterest is supported by Adele's low score on the OSAT student-instruction interaction factor (Table 61), but is denied by her maximum score on the PCAS importance of doing well at school factor (Table 63). Again, the evidence is inconclusive. There seem to be reasonable grounds, however, to doubt the accuracy of many of Adele's extreme, positive responses to the attitude questionnaires as they relate to feelings toward Ms. Newton and the instructional setting.

The final group of factors to be commented on relate to Adele's academic status. According to various questionnaire factors, Adele had an extremely high academic self-image (Table 72); she was extremely interested in schoolwork (Table 61); she had an extremely positive attitude toward the academic aspects of school (Table 63); she had very strong positive attitudes toward doing well at school (Table 63); and she did not perceive schoolwork to be very difficult (Table 72). These professed attitudes, as noted earlier, received little support from Adele's observed behaviours and the perceptions of the observers in this investigation. Furthermore, Adele's actual academic accomplishments detract from the credibility of such professed attitudes.

According to Ms. Newton, Adele's rankings in a class of 28 in late May, 1976 were: language arts -- twenty-fourth, mathematics --

twenty-second, and overall -- twenty-fifth (Table 69). The accuracy of these assessments is supported by Adele's results on the MAT written in June, 1976. Adele's ranks on the June MAT were: total reading -- twenty-sixth, language -- nineteenth, total mathematics -- twenty-sixth (Table 68). In addition, Adele's scores for the CLT written in September, 1975 indicated that she had lower than average academic attributes for her class and ranked twenty-first, seventeenth, and eighteenth respectively for the verbal, nonverbal, and total DIQs (Table 66).

Thus, Ms. Newton's expectations for Adele were perhaps consistent with Adele's academic attributes, but were higher than her actual achievements. Obviously, Ms. Newton had expectations for academic achievement which Adele fell below or far below even though she recognized Adele's below average academic abilities (Table 70).

From the evidence gained through this investigation, it appears that teacher-expectancies did not assist Adele in reaching her academic potential which was, in any case, low. More than teacher-expectancies, it appears that Adele would have benefitted from a teaching/learning situation which penetrated her lack of real interest and enthusiasm for schoolwork: a teaching methodology and classroom climate which would stimulate her attention, motivate her to maintain on-task behaviours, and sustain her interest over time. It would be facile but unfair to hold Ms. Newton's inexperience and low management, instructional, and interpersonal skills responsible for Adele's lack of achievement. Most of Adele's grade three year had been spent with another, experienced teacher whose assessment of Adele's efforts and achievements in class were apparently lower and less encouraging than those of Ms. Newton (Table 71).

It is difficult to assess the role of the home environment in Adele's school experiences. In spite of her professed concern for and enjoyment of schoolwork, it seems that in reality Adele was not an academically highly motivated student. Neither of her parents had completed a grade twelve education, and Mr. Unwin's Blishen rating was one of the lowest in the class. There did not appear to be parental expectation or pressure for Adele to do well academically. Although Adele's parents had expressed concern over the negative comments on her report card, it is not clear that they reinforced this directly with Adele.

There is no evidence or suggestion that home was an unhappy place for Adele, neither did school appear to be a wholly positive or pleasurable experience. Being a pupil in Room 6, however, did provide Adele with sufficient enjoyment and self-expression through limited social contacts and play opportunities for her to have positive attitudes toward the concept of school. These general, positive attitudes seemed to have induced a halo effect which resulted in Adele's positive though inaccurate responses to the attitude questionnaires. The actual teaching/learning situation did not provide Adele with successful or particularly enjoyable experiences.

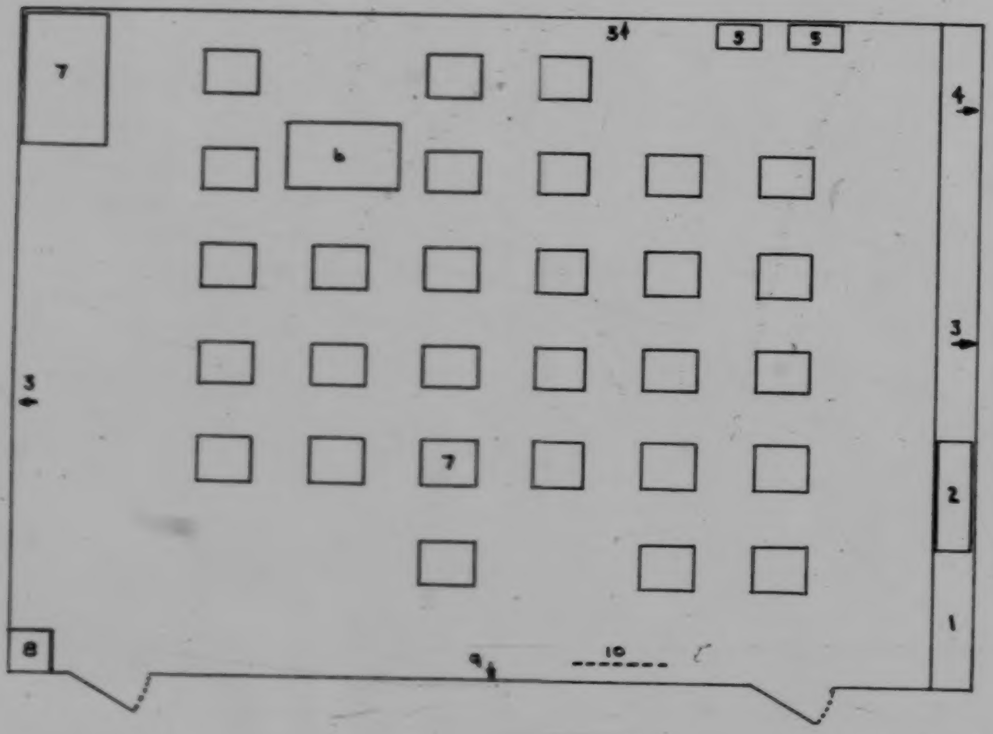
## The grade six classroom: Room 1

Room 1 was located at the eastern corner of the ground floor of the original part of Napier School (see Figure 21, p. 307). From Figure 32, it is seen that the room, although not large, was comparatively long and narrow. A large window, looking out over the school playing field, was set in the narrow outside wall, and two doorways gave entrance to the room from the hallway which ran alongside one of the longer walls.

According to one classroom observer, Room 1 was "not a bright, colourful, stimulating room," in fact it looked "rather old and drab" (Anecdotal Notes F, 2). The drabness of the room was accentuated by the flecked grey semastic tile floor, off-white and green walls, and dark wood-strip ceiling with green painted wooden beams. A cork bulletin board, medium-brown in colour, ran the length of one long wall, while a green chalkboard dominated the wall opposite. Bulletin boards also lined the narrow end-walls. Apart from the window, lighting was provided by fluorescent strip lights and, although not bright, was sufficient for all classroom purposes.

As seen in Figure 32, 30 pupil desks were arranged in six rows. The teacher's desk was located in one corner at the rear of the room. The only evident storage space available in Room 1 was one tall cupboard, and one set of shelves beneath the window. The pupils stored their materials in their own desks. One large work table completed the furniture in the room.

Teacher- and pupil-prepared posters and commercially produced materials covered much of the bulletin board space. These posters were not altered or added to during this investigation, and appeared



KEY

1. Shelving
2. Hamster Cage
3. Tackboard
4. Window
5. Fish Tanks
6. Teacher's Desk
7. Table
8. Cupboard
9. Chalkboard
10. Film Screen

Figure 32

Environmental Details of Room 1, Napier School

to have been in place for several months. They included: pupil drawings illustrating rules of grammar, and pupil poems and essays; teacher-prepared charts giving rules for spelling, language usage, and action verbs; and 24 commercially produced posters depicting scenes from Ancient Greece, and three French travel posters. There was no public evidence of class marks lists or achievement charts or records.

Apart from the chalkboards, the only instructional equipment permanently retained in Room 1 appeared to be a movie screen (suspended from the ceiling at the front of the room). A considerable variety of audio-visual equipment was available to the teacher via the central storage room at Napier School, however. The available resource learning materials in Room 1 consisted of a large dictionary, 25 novels and assorted short stories, and 20 copies of issues of the National Geographic magazine. There were also class sets and small group sets of 11 texts dealing variously with English language, reading and arithmetic. Finally, there were two fish tanks complete with tropical fish, and one cage housing two hampsters. There was no evidence of paper and other work or study materials, although the teacher had access to these via the school's supply store and sent for them when needed.

There appeared to be no attempt to sub-divide the classroom space or to create learning stations. The teacher commented that he had used various arrangements of the pupil desks, but found the use of rows to be most beneficial for learning purposes. The large work table was sometimes used by individual pupils for reading or working on projects, and it was occasionally used for small group discussions.

During the time of this investigation, the frequently high room temperature and poor air circulation were often noticed by the classroom observers. These conditions were sometimes commented on by the teacher and pupils, and sometimes seemed to have a deleterious effect on the learning situation. Temperatures in the afternoons were often at 23°C, and sometimes higher. The school furnace and air circulation machinery (located in an adjacent room) sometimes created a noisy disturbance, but disruptive noise was generally not a problem except when a neighboring class used the shared hallway as an activity area.

## The grade six teacher: Mr. Corbett

### Introduction

Mr. Dick Corbett was born and received all his early upbringing and education in a large city of English-speaking eastern Canada. His father had graduated from high school and had achieved good success in the business world, and his mother had worked as a clerk for the provincial government. Mr. Corbett had one sister.

At the time of this investigation, Mr. Corbett was 32 years of age, married, but with no children. He had attended teacher college and had taught in eastern Canada before migrating to Alberta to complete a Bachelor of Education degree. His previous teaching experiences also included a brief time at a secondary modern school in England. His subject specializations were English Language and Reading, and he had almost completed the requirements for a Master of Education degree in the area of reading at the elementary grades level. He was into his second year of teaching at Napier School, but had not taught elsewhere in Alberta.

According to the classroom observers, Mr. Corbett was a forceful, self-assured person who enjoyed his work, and especially the friendly relationship he had with his pupils (Anecdotal Notes F, 1 and 2). The observers recognized the possible effects of some atypical events which occurred during the period of this investigation, however, and these are briefly mentioned. First, there was a personnel problem at Napier School involving one of Mr. Corbett's colleagues and the school administration. Although Mr. Corbett was not directly involved, he admitted being concerned and emotionally affected by events connected with the situation. Second, Mr. Corbett was required to spend several days in hospital during the investigation in order to undergo scheduled treatment for a minor ailment. Third, and most importantly, Mr. Corbett was coordinator of the preparations for the school's grade six outdoor education experience. This was to be a week-long stay at an outdoors camp, and the preparations demanded Mr. Corbett's time on some weekends and evenings, and continually engaged his attention during two weeks of this investigation.

For the reasons mentioned above, it is perhaps understandable that the classroom observers noted that Mr. Corbett was unprepared for teaching his class on several occasions during this investigation, a fact which Mr. Corbett admitted to his pupils and for which he excused himself, citing the demands on his time made by the outdoor education preparations.

Pupil attitudes toward Mr. Corbett, the class, and schoolwork are summarized in Table 76. From the MCI satisfaction with the class factor and the PCAS attitude to class factor, it seems that Mr. Corbett's pupils were only moderately satisfied with being in his class. For example, 12 pupils agreed with the PCAS item that they would "rather be in my class than the other classes for my age," but eight pupils disagreed. Also, only six pupils agreed that they would be sorry to leave their class (PCAS), and 13 disagreed. In their responses to the MCI items, it appears that Mr. Corbett's pupils perceived their peers to have more negative attitudes than actually existed. Only 10 children agreed with the MCI item "Most children say the class is fun"; yet 20 pupils agreed with the item "The class is fun."

The WSAT represents a measure of pupil attitudes toward the school environment and the accompanying educational experiences. From Table 76, it is seen that the class mean score for this test was 101.80. According to Rivera (1973), a score over 100 represents a positive response to school, thus Mr. Corbett's pupils had a generally positive attitude toward school. According to the WSAT, this attitude was most notable in student-instruction interaction. Mr. Corbett's pupils were not unanimous in responding to any of the items on the WSAT, but typical of their response was that six pupils agreed that they liked the things they did in their school "most of the time," 18 liked them "some of the time," and two liked them "not very often." In the class's most negative response on this factor, only 6 pupils agreed that what they learned in class made them want to learn more "most of the time," whereas 11 children stated that this occured "not very often."

On similar items in the PCAS interest in schoolwork factor, Mr. Corbett's pupils again showed a mixed but more negative attitude. On one item, for example, 21 children agreed that school lessons were "sometimes" boring; the remaining five pupils agreed that lessons were boring "most of the time." Perhaps rather more negative was the class response to another item: only five pupils agreed that they had interesting lessons "most of the time" or "sometimes," the remaining 21 agreed that this was "hardly ever" true.

| Instrument | Factor | | | | | Complete instrument | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Title | Tom's score | (max) | Class mean | (SD) | Tom's score | (max) | Class mean | (SD) |
| MCI | satisfaction with the class | 19 | (27) | 18.76 | (4.94) | 93 | (135) | 91.96 | (6.89) |
| WSAT | student-instruction interaction | 63 | (78) | 58.76 | (6.02) | 104 | (138) | 101.80 | (9.44) |
| PCAS | interest in schoolwork | 5 | (6) | 2.48 | (1.10) | 61 | (84) | 47.84 | (9.20) |
| | attitude to class | 15 | (16) | 9.32 | (3.57) | | | | |
| | relationship with teacher | 6 | (6) | 3.24 | (1.45) | | | | |

Table 76. Attitudes held by Mr. Corbett's pupils, including Tom, toward selected class, instruction, and teacher factors.

It should be made clear that Mr. Corbett taught his homeroom class for language arts only, and from their responses, it is not clear whether students were revealing attitudes in reaction to Mr. Corbett or to their other subject teachers. The PCAS relationship with teacher factor was a direct reference to Mr. Corbett, however, and from Table 76, it is evident that Mr. Corbett enjoyed a moderately positive relationship with his class. Fourteen pupils agreed that their teacher "got on well" with them "most of the time," 11 agreed that this was true "sometimes," and 1 child thought that this "hardly ever" happened (PCAS). Similarly, responses to another item revealed that 14 pupils thought that their teacher liked them, but the remainder were not sure or did not think so. But perhaps most significantly, only three pupils agreed that Mr. Corbett was interested in them; the remaining 23 children were "not sure" or did not think so (PCAS).

According to his high MTAI score (86th percentile), Mr. Corbett should have had good success in his interpersonal relationships with his pupils (see Appendix H). As noted above, according to the results of various pupil attitude questionnaires, Mr. Corbett was moderately successful in such relationships. Undoubtedly, Mr. Corbett had the ability to be very personable and to be able to interest and motivate his students. According to one classroom observer, in the early part of this investigation Mr. Corbett showed himself to be "sensitive to what is going on in class, sincerely interested in helping the students and in establishing an atmosphere of respect" (Anecdotal Notes F, 1). Another observer noted that Mr. Corbett "interacted softly and warmly" with his pupils, and discussed classroom rule infractions with them in a positive manner (Anecdotal Notes F, 2). As the investigation continued over a four-week period, however, the observers made increasingly frequent references to Mr. Corbett being unprepared for class (because of the demands made on his time by the outdoor education experience), and to his being irritated, lacking in (his usual) dynamism, preoccupied and atypically tense while teaching, and erratic in his tolerance of pupil classroom control behaviours. It was at the end of the four-week investigation period that the attitude questionnaires were administered, and it is possible that the children interpreted Mr. Corbett's most recent manner as one of indifference or even dislike and reacted to these attitudes in their questionnaire responses.

Further insight into Mr. Corbett's personality is provided by the results of the 16 PF questionnaire administered to him. According to this questionnaire, Mr. Corbett was "extremely intelligent and imaginative, and very experimenting," but these positive characteristics were apparently off-set by his also being "very expedient and undisciplined, with much self-conflict." It is primarily this combination of personality factors which seems to have given rise to Mr. Corbett's inconsistent behaviours as observed during this investigation. That the observed behaviours were so evident is possibly attributable to other aspects of Mr. Corbett's personality: the 16 PF showed him to be "very assertive and forthright," but also "strongly reserved, self-sufficient, and tense."

A final index of Mr. Corbett is provided by his score on the TIBT (see Appendix J). According to the TIBT, Mr. Corbett was classified as System 1 with traces of System 2 (see Appendix G). The TIBT classifies a System 1 person as:

> A person who has definite stands on every topic, states them evaluatively and unequivocally, and rejects things if they do not meet his high standards or ideals of perfection. The reader may feel that this subject is rather hostile toward his environment and other people, but there is an underlying sense of stable acceptance of things as they should (ought, must, etc.) be by his standards. ... Uncertainty is anathema to a System 1, and both content and structure in his responses demonstrate his drive to reject uncertainty and to find and maintain certainty in his environment (Harvey, Prather, White, and Alder, 1966).

Mr. Corbett's most notable characteristics, as recorded by his scores on the auxiliary dimentions of the TIBT, were his very low Externality (i.e., he tended to attribute success, failure, and control of his actions to himself), and his low Openness, Cynicism, and Optimism. A deeper insight into Mr. Corbett's beliefs is provided by his actual responses to the TIBT. He believed, for example, that:

> The Canadian way of life provides opportunities for our citizens to be what they want to be.
>
> You are what you do. I can believe in whatever I wish without having a framework (i.e., religion) placed on me.
>
> People are basically good and will do good. I believe that people who are treated with this premise in mind will flourish and grow. I believe this is the only way that children will truly develop.
>
> Revenge is not the most important thing to me ... but when someone has treated me unfairly I do like to make them aware of this.
>
> If I go away by not saying what I feel, and by covering this with a lie, I only cause myself more turmoil, and I don't need this.
>
> I need a friend who I can approach no matter what the problem or subject can be.... With a friend I can share my problems, weaknesses, joys, and happiness.
>
> I believe that there must be a reason for ... (backtalk) and I try to understand this. I encourage my students to disagree with me provided they back up what they're saying. Hopefully it is done in a civil manner.

> I feel I have the power to control all the important things in my life. I always in every situation can make a decision. I refuse to accept that someone else can dictate what I can do in life, recognising ... that there are certain restrictions imposed by governments which I choose to accept.

From the statements quoted above, it is seen that Mr. Corbett had strongly held opinions on several topics. During one of several interviews given by Mr. Corbett, he maintained his strength of conviction, but was more explicit. A clearer explanation of the inconsistencies noted in his classroom behaviour and discussed earlier in this section is provided in the following quotation:

> I like to see myself as a facilitator of learning -- as a friend. Kids know that I'm an adult, I'm a teacher -- but they can also see that a teacher can establish meaningful relationship with a child and that I can indeed be turned to or that I can share some of my problems. That's why I talk about my dog, or talk about when I'm sad, or talk about when I'm angry -- because they've got to know that I'm human too... I tell them what bothers me.... A teacher has to be first a good human being, and maybe I'm not always. I may promise the kids, and not always carry through -- but then that's life too. It has to be close to a realy situation -- I really feel I'm committed to that (Teacher Interview F, Part 1).

The next sections will examine Mr. Corbett's goals, curriculum content, and classroom methods and policies in an attempt to explicate these in light of his personality and stated beliefs.

### Goals

In presenting the next sections of this chapter, it is important to bear in mind that Mr. Corbett, although the homeroom teacher for his grade six class, actually was their teacher for only part of the total curriculum. Mr. Corbett taught reading and language arts to his own class -- all other lessons were taught by subject specialists, a situation which he regretted. The information and discussion which follow must be considered in the context of the limited amount of contact between Mr. Corbett and his pupils.

During an interview which focused on goals, curriculum, and classroom routines and policies, Mr. Corbett was asked what kinds of things he considered "to be most important for these children to get out of school": he replied, "I would want the same things for these kids as I would want for my own children -- when and If I have any" (Teacher Interview F, Part 1). Although he did not place a priority ranking on his goal statements, Mr. Corbett did mention first those goals that he thought most important. The first goals mentioned by Mr. Corbett were in the cognitive domain. His goals for his students have been extracted from the various teacher interviews and may be summarized as follows:

Cognitive goals

- to develop a process of thinking through to a solution
- to be capable of independent thought ("not simply to acquire knowledge")
- to be capable of researching a problem (through reading) in order to find a solution or to give a considered opinion on social issues
- both to learn the basic skills (of reading and language) and to develop creative thought

Affective goals

- to have an interest in and feeling for literature
- to have a reverence for life

Social goals

- to be tolerant
- to care about social problems and to try to solve them

Combined goals

- to be able to think through problems and face them ("preparation for life")
- to acquire the skills to carry on everyday living and be a participant in the process of government
- to be interpretive and evaluative in reading

During further discussion, Mr. Corbett stated very strongly that the affective and cognitive goals could not be separated. Later in the interview he explained that he did not deliberately plan his lessons with certain affective and cognitive goals ascribed to specific classroom activities: he admitted, however, to leaning "a little bit toward the cognitive." He regretted that, in his teaching, he had not been able more satisfactorily to combine the achievement of both cognitive and affective goals.

Mr. Corbett found it difficult to assess to what extent he considered his pupils had achieved or were achieving his goals for them. He noted that there were days when he considered that "these kids are just really in tune with things -- they really care and they really feel and I would really believe that they do" (Teacher Interview F, Part 1). There were days, on the other hand, when "something vicious would happen, and I sometimes think kids treat one another viciously without thinking." Mr. Corbett felt that perhaps it was partly his fault that "the kids haven't developed to the same extent -- consistently -- the affective and cognitive things together." He considered himself an optimist, however, and believed there were more days when his pupils were behaving more positively than there were days when they displayed undersirable behaviours (Teacher Interview F, Part 1).

## Curriculum Content and Organization

An example of the daily timetable for Mr. Corbett's class is presented below. Only the lessons in language arts, which were taught by Mr. Corbett, will be discussed in detail.

Subjects

- language arts
- mathematics and science
- social studies
- French
- physical education
- music
- art
- library

Timetable example (6-day cycle)

| A.M. | | P.M. | |
|---|---|---|---|
| 8:40 | opening exercise | 12:35 | language arts or library |
| 8:45 | physical education | 1:10 | music or math/science |
| 9:15 | language arts | 1:45 | RECESS |
| 9:50 | RECESS | 2:00 | language arts |
| 10:05 | language arts | 2:35 | social studies |
| 10:40 | language arts or French | 3:10 | SCHOOL OUT |
| 11:15 | LUNCH | | |

Mr. Corbett based the content of his teaching largely on his own values and knowledge of reading, his training, his past teaching experiences, and his judgement of "the kind of things I could expect a grade six child to be able to do, and what I think he needs to be able to get through junior high later on" (Teacher Interview F, Part 1). Mr. Corbett claimed to be aware of the provincial curriculum guide in a general sense, but admitted to being not sure that he followed it exactly.

Mr. Corbett recognized that his pupils were at various levels of achievement in reading and other language arts skills, and adjusted his teaching accordingly. His knowledge of his students' abilities was based partly on day-to-day observation, but also on informal and formal diagnostic exercises and tests he had administered early in the school year. Sometimes he taught directly to perceived needs: "If a child is having trouble with determining sequence in a story, then I try to provide a lesson or experiences where they can improve that, because I think that is something that I think a child needs to know" (Teacher Interview F, Part 1). At other times he taught a skill because he considered it to be one that all children should know, even though he was aware that some pupils had already acquired that particular skill.

Classroom 1 had a number of reading texts from which to study. Mr. Corbett's predecessor had collected and left "four or five sets of readers" which Mr. Corbett thought highly of. Included among these were Young Canada readers, Open Highways, and Cavalcades. The novel, The Incredible Journey, was assigned reading for the most able pupils. These texts were supplemented with magazines, brochures, and informative publications from various government agencies such as the post office. Magazines and newspapers were also used to teach pupils to recognize fact and fiction, and the use of "propaganda." Mr. Corbett estimated that perhaps 30 percent of his teaching was done using supplementary reading materials.

As suggested earlier in this section, Mr. Corbett, although classifying himself as a reading specialist, would have preferred to have taught his homeroom class for most subjects. He favoured platooning for music and physical education, because of the benefits offered by those subject specialist teachers, but otherwise considered the arguments for self-contained classroom instruction to be compelling. Chief among these arguments were the advantages offered by the integration of subject matter in the self-contained classroom situation.

Another change in the curriculum favoured by Mr. Corbett was the institution of a course in "communications." A course in communications taught by Mr. Corbett would include transaction analysis for the understanding that it would promote amongst classroom members. Mr. Corbett had taken courses in counselling psychology and some of his duties included those of a school counsellor, and he was familiar with and advocated the concepts of Dreikurs and Adler.

Other changes favoured by Mr. Corbett included items over which he had control, but neglected to alter. He preferred more oral work -- debating and public speaking -- in his classes, but "for some reason this year I haven't spent much time on the oral kinds of things" (Teacher Interview F, Part 2). Also, although he professed not to prefer having student desks arranged in rows, such was the arrangement in Room 1 because "this year the children in this group (class) .. have had difficulty working together constructively in groups (Teacher Interview F, Part 2).

## Instructional Methods and Policies

When asked what kinds of learning activities he frequently employed in his teaching, Mr. Corbett replied "I don't think I have been using as much as I could" (Teacher Interview F, Part 1). From various recorded interviews with Mr. Corbett and one of his pupils, and from the notes of the classroom observers, the following summary of his instructional methods and policies has been compiled.

Methods

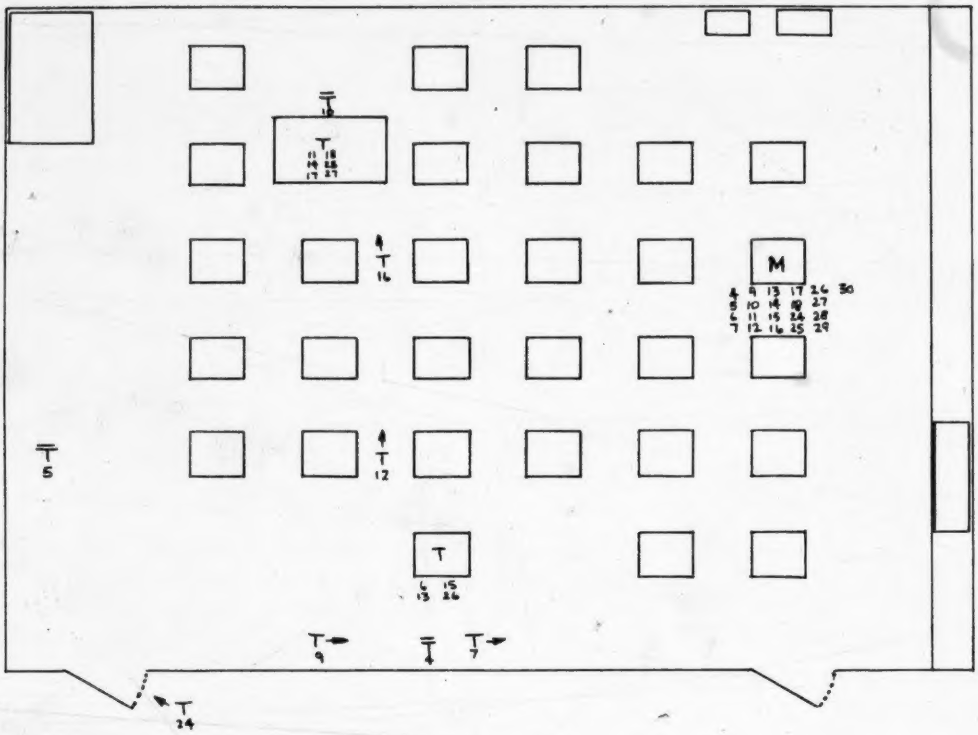
- lecture to whole class
- teacher-led class discussion
- small-group discussions (groups usually based on skill needs)
- individual instruction
- worksheets (usually selected from class texts with 'good follow-up activities')
- teaching strategies varied from direct to guided discovery,

usually through discussion
- films were sometimes used to promote discussion
- some integration of external topics and subjects into language arts activities

Policies

- pupils usually sat in own desks to work
- conversation (in moderation) and movement allowed during seat- and project-work when the teacher or a pupil addressed the whole class.
- pupils requested teacher's permission to use the bathroom
- on entry to room pupils usually sat at desks, but no stringent rules
- teacher gave general permission to vacate the room provided desks and floor were tidy
- to cope with deviant behaviour:
  - . teacher used eye contact, a stern look, followed by a smile to gain attention
  - . teacher walked over to remove offending object if pupil was fidgeting
  - . teacher asked "what don't you understand?" to place students on task, or ordered pupils to "Stop, sit down, get going!"
  - . a general behaviour problem was often discussed by the whole class to find a solution
  - . for persistent misbehaviour, the teacher appealed to "good manners," raised an "angry voice," or detained pupils after school.

During the time of this investigation, that is, over a four-week period of frequent classroom visitations by the investigators, Mr. Corbett's apparent classroom manner and his preparations for daily teaching were rather casual. This factor has been previously referred to, but it is not suggested that such an attitude was typical of Mr. Corbett's teaching over the course of the school year, or throughout Mr. Corbett's career. From Figure 33 it is seen that during one day Mr. Corbett spent just over one third of his time seated or standing at his desk, just over one third of his time moving or standing about the room (usually in the half containing his desk), and one quarter of his time seated on the top of a student-desk, with his feet resting on the seat (Shadow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KEY

T = Mr. Corbett
$\underline{M}$ = Tom
$\overline{M}$ = Standing
←M = Walking
$\boxed{M}$ = In Desk
Subscripts = Locations in order of sampling

Figure 33

Map of Mr. Corbett's and Tom's classroom locations plotted every tenth minute throughout one day. (Shadow Study Notes F)

Study F).

Much of Mr. Corbett's teaching was teacher-dominated. He frequently read stories and poems or presented hypothetical situations to the class which served as bases for teacher-led class discussions. During such discussions, he often tried to promote understanding, clarity of thought and argument, an appreciation of the material, and the self-esteem of students. Mr. Corbett's usual modus operandi was to make a class presentation (e.g., by reading a poem or by playing a popular recording of an appropriate song), which was followed by questioning and class discussion, which in turn was followed with assigned seatwork. Frequently, the resulting pupil compositions were read to the class by their authors or by the teacher.

From Table 77, it is seen that pupils were most frequently located in their own desks during language arts lessons. Although there was little continual movement about the room, pupils quite frequently moved their desks to facilitate the sharing of a book, or for group work assignments. But such movement of student-desks did not result in the complete reorganization of the classroom furniture.

The next section will present a detailed discussion of selected aspects of Mr. Corbett's classroom behaviours in relationship to his curriculum plans and goal statements.

## Discussion

An examination of the relationships among Mr. Corbett's goal statements, curriculum plans, and teaching strategies is made difficult because of the frequent lack of congruency among these elements. It is also difficult to find consistency among the various measures of

| Time samples in order | Locations of pupils (N = 24) |  |  |  |  |  | Notes |
|---|---|---|---|---|---|---|---|
|  | in own desks | moving to/ from desks | at work table | at T's desk | standing about | out of room |  |
| 1 |  |  |  |  |  |  | Physical education (episodes #1-3) -- on field. |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 | 22[a] |  |  |  |  | 2 | Language arts (episodes #4-7) -- with Mr. Corbett. |
| 5 | 24[a] |  |  |  |  |  |  |
| 6 | 24[a] |  |  |  |  |  |  |
| 7 | 21[a] | 1 | 2 |  |  |  |  |
| 8 | RECESS -- ALL CHILDREN OUTSIDE |  |  |  |  |  |  |
| 9 | 22[a] |  | 2 |  |  |  | Language arts (episodes #9-15) -- with Mr. Corbett. |
| 10 | 21[a] | 1 | 2 |  |  |  |  |
| 11 | 20[a] | 1 | 2 | 1 |  |  |  |
| 12 | 21[a] |  | 3 |  |  |  |  |
| 13 | 22[a] |  | 2 |  |  |  |  |
| 14 | 22[a] |  | 2 |  |  |  |  |
| 15 | 22[a] |  | 1 | 1 |  |  |  |
| 16 | 22[a] |  |  |  |  | 2 | Language arts (episodes #16-18) -- with Mr. Corbett. |
| 17 | 24[a] |  |  |  |  |  |  |
| 18 | 24[a] |  |  |  |  |  |  |
| 19 |  |  |  |  |  |  | Music (episodes #19-22) -- waiting outside music room |
| 20 |  |  |  |  |  |  | Episodes #20-22 -- all pupils seated in music room. |
| 21 |  |  |  |  |  |  |  |
| 22 |  |  |  |  |  |  |  |
| 23 | RECESS -- ALL CHILDREN OUTSIDE |  |  |  |  |  |  |
| 24 | 13[a] | 3 |  | 4 |  | 4 | Language arts (episodes #24-27) -- with Mr. Corbett. |
| 25 | 22[a] |  |  | 1 |  | 1 |  |
| 26 | 23[a] | 1 |  |  |  |  |  |
| 27 | 24[a] |  |  |  |  |  |  |
| 28 | 24[a] |  |  |  |  |  | Social studies (episodes #28-30). |
| 29 | 24[a] |  |  |  |  |  |  |
| 30 | 24[a] |  |  |  |  |  |  |

[a] location of Tom

Table 77. Locations of pupils and Mr. Corbett in Room 1 as sampled every tenth minute throughout one day (Shadow Study Notes F).

Mr. Corbett's personality and his observed teaching behaviours. In this section an attempt will be made to explicate Mr. Corbett's classroom behaviours in light of his goal statements and his personality, and to try to show the effects of these behaviours on classroom events.

The timing of this investigation coincided with happenings which were significant in the lives of the children and teachers of Napier School. The investigators entered the school early in May when there were just eight weeks of the school year remaining. Also, late April had seen the last of the snow and the beginning of the warm, sunny weather for this Albertan community. Several important school events took place during this investigation: an orientation visit by the grade six classes to the junior high school they were to attend in the fall, school sports day, a school assembly (at which Mr. Corbett's class played their recorders) to honour a school benefactor, a week-long outdoor education camping experience, and this investigation itself. All of these events may be regarded as typical for schools in the Westham and neighbouring districts, nevertheless, they may have had reactive effects on the classroom behaviours of both teacher and pupils which did not occur in the same way or to the same degree at other times of the year. Such factors, together with the items concerning Mr. Corbett made reference to earlier in this chapter (see p. 454), should be borne in mind in the discussion which follows.

A particular factor which seemed to distract Mr. Corbett from achieving or consistently attempting to achieve his stated goals was that of having to share his pupils with several other teachers. He offered this as a reason for his pupils experiencing "difficulty in forming groups to do something together." Also, he attributed this difficulty "to a different teaching style now (as opposed to previous years) or the fact that I haven't stressed that (i.e., forming groups) as much -- before I was with the kids all day, it was a self-contained classroom" (Teacher Interview F, Part 1). But the fact of not having a self-contained class did not prevent Mr. Corbett from developing and employing small group activities for the several lessons which his pupils spent every day in their homeroom with Mr. Corbett.

Similarly, Mr. Corbett decried the arrangement of students' desks in Room 1. He claimed that he did not "find that to be the most suitable (arrangement) for my purposes," inferring that he generally used other configurations in his teaching, yet he did not attempt to alter the situation in Room 1. It would have been a comparatively easy task to rearrange the desk configuration for the daily blocks of language arts lessons taught by Mr. Corbett, even if visiting teachers for other subjects chose to revert to the row formation.

Another self-admitted inconsistency in Mr. Corbett's teaching was his failure to organize his pupils into groups for learning tasks on a frequent or regularized basis. He mentioned that he occasionally had "a small group discussion on specific skills or a specific book or poem ... (or he would) sometimes haul some kids out of one activity ... and give them a reading skill" which would help them overcome a skill deficiency (Teacher Interview F, Part 1). During the current year, however, he felt he had not used as many varied learning activities as in previous years, and that he had relied mainly on whole-class discussions led by himself (Teacher Interview F, Part 1). By not using his preferred teaching methods, he was presumably detracting from some of his learning goals.

It is possible that some pupils more than others suffered from Mr. Corbett's failure to employ more suitable teaching strategies and techniques of classroom organization. It may be presumed that the more capable and highly motivated pupils were more vocal in total class discussions, and more efficient in their work habits if left to their own devices. It was also possible, however, for other students to wallow in their ignorance and inefficiency. Observations in support of this presumption were recorded by the classroom observers. During one mid-morning class, for example, the observers noted:

> During this time Val and Kelly are doing a great deal of chatting.
>
> There is a lot of talk and restlessness during this class. By and large the teacher pays little attention to it.
>
> Danny and Bob are fooling around a great deal during class.

And on other occasions they noted:

> Kelly spent quite a lot of time gazing around.
> Some kids worked; other kids chatted.
>
> The kids seemed tired and/or bored today (Anecdotal Notes F, 1 and 2).

The Shadow Study observer's notes support the above illustrations. During a lesson which focused on poetry composition by the students, for example, some pupils were seen chatting, sharpening pencils, and rattling papers rather than being productively on task. The Shadow Study pupil was particularly noticed as being off-task:

> Playing with his ballpoint pen -- took the spring out. Inserted pencil into the end of the pen. Then glanced around at Danny who is writing, then back to playing with the spring on the pen. Has not written a word (not thinking about it, either). Glanced at Adele, who was making her way back to her seat in front of him (Shadow Study Notes F).

Figure 33, although it records data for only one day, also supports the propositions that some pupils could have been very much neglected by Mr. Corbett. From Figure 33, it is seen that during one day Mr. Corbett interacted very little with individual pupils and, during the times sampled, did not enter one half of the room at all. And from Table 77, it is seen that very few students attended Mr. Corbett's desk for assistance.

In order to meet some aspects of his stated goals, it would have been appropriate for Mr. Corbett to have stressed pupil verbal presentations and interactions in his teaching. He regretted, however, that "This year I haven't spent much time on the oral kinds of things -- debating, public speaking -- that's just one thing that, for some reason or another, I have neglected more than I have in other years" (Teacher Interview F, Part 1).

In spite of the negative connotations of the summaries of Mr. Corbett's teaching presented above, the classroom observers were generally favourably impressed with Mr. Corbett's abilities as a teacher. He had, however, allowed himself to be unprepared for much of his teaching during this investigation, and the observers were very conscious of this, as reflected in their Anecdotal Notes. The classroom observers commented favourably on Mr. Corbett's ability to maintain classroom control and pupil on-task behaviours when he was prepared in his teaching and energetic in his manner.

Concerning class control, Mr. Corbett described the process by which the class had arrived at a solution to the "noise problem" in the room. He had instigated a class discussion in which the pupils made several suggestions: one, send offending pupils to the principal; two, give the strap; three, stand the offending pupil in the corner of the room; and four, call the police. Mr. Corbett reported that he rejected these suggestions for various reasons, but the pupils rejected the suggestion that offenders "write lines." It was finally agreed that all class members would be considerate of each other, and that pupils who had incomplete classwork because of inattention would complete the work at home. In controlling classroom misbehaviours, the observers noted that Mr. Corbett stressed the desirability of courteous behaviour.

In situations where Mr. Corbett found it necessary to be firm or loud in his remonstrances with pupils, he usually completed the interaction softly, in a positive manner, and quite often with humour. He was frequently warm in his interactions with individual students, and there appeared to be mutual enjoyment in each other's company. One classroom observer was particularly impressed with the student response to Mr. Corbett during a playground stroll at recess time.

At the time of this investigation, however, Mr. Corbett seemed frequently to be irritated or exasperated at classroom events. These events were not always attributable to the behaviour of the grade six pupils, nor was Mr. Corbett necessarily repressive towards his students, but his annoyance was evident to them. Mr. Corbett's shortness was perhaps understandable for reasons already discussed, but even though atypical of him, the unpleasant and uncaring manner intermittently and possibly unintentionally displayed during this investigation may well have been the one his pupils responded to in completing the questionnaires indicating their attitudes toward Mr. Corbett.

When asked to list a teacher's most important task, Mr. Corbett mentioned:

- to be a facilitator of learning
- to provide pupils with worthwhile experiences
- to guide pupils
- to be a counsellor to pupils in academic, family, and social matters
- to develop a good relationship with pupils in order to assist teaching/learning (i.e., pupils learn first because they like and respect the teacher)
- to provide security in the classroom
- to be a source of information and to give information
- to be a friend to pupils
- to be a model of good human behaviour (Teacher Interview F, Part 1)

In his teaching, it appeared that Mr. Corbett had tried to undertake many of the tasks listed above. Furthermore, he gave the appearance of being capable of succeeding quite well in those tasks, but he had in fact fallen short. Some reasons have been offered why Mr. Corbett had not achieved more fully to the extent of his capabilities, and it is interesting to note that Mr. Corbett also had his own self-doubts. He considered the last two items on the above list to be of special importance:

> I would like to see myself as a facilitator in terms of what Carl Rogers and some of those people talk about -- but I'm just not there yet. I'm not that secure with myself.

Similarly:

> A teacher has to be first a good human being, and maybe I'm not always (Teacher Interview F, Part 1).

For reasons already discussed, it is probable that the HIRS measures of Mr. Corbett's classroom management, instructional, and interpersonal skills were not as high as they may have been had they been assessed earlier in the year. According to the HIRS ratings, Mr. Corbett had quite good skills in each of the areas mentioned (see Appendix J). Ironically, his highest rating was for "warmth" (i.e., deeply caring, prizing, and valuing each student and making this clear to the students), while his lowest rating was for empathy (i.e., adding significantly to the feeling and meaning of the expressions of students).

In summary, it is suggested that Mr. Corbett was a generally competent and concerned teacher who was probably effective in attaining some of his affective goals with all his students. Also, he was probably instrumental in helping some of his pupils significantly improve in some of his cognitive objectives. It seems likely, however, that less able students who were retiring in their manner, lacking in academic self-esteem, and/or had poor work habits were not noticeable targets for Mr. Corbett's in-class interactions, and accomplished little in terms of his goals for them.

The next sections will examine the personality and classroom experiences of Tom Underwood, one of Mr. Corbett's pupils and the subject of the Shadow Study.

## The grade six pupil: Tom Underwood

### Influence of the home and attitude toward school

Tom was one of 20 pupils in Mr. Corbett's class who had been born in towns elsewhere in Alberta before moving to the city of Westham.

The remaining six students had been born in other western provinces, Ontario, and the United Kingdom. Tom had joined Napier School at the beginning of grade five. He was almost 12 years old at the time of this investigation, just two months younger than the class mean age.

Tom was quite well-built and of average size for his age. He was a pleasant-looking boy, with generally tidy dark hair, open features, and an often dreamy almost vacuous expression on his face. He was usually dressed in T-shirt, jeans, and running-shoes -- typical of other boys in his class. He seemed to enjoy general good health, and had missed only two days of school in the current year.

Mr. Underwood, Tom's father, was employed as a supervisor (Blishen score of 65.78) with a large electrical company, and Mrs. Underwood was the family homemaker. Tom's only sibling was an identical twin brother who was enrolled in another grade six class at Napier School. The Underwoods were an integral family and gave Lutheran as their religious affiliation.

Mr. Underwood had attended high school, but had not completed a grade twelve education. Mrs. Underwood had continued her education to grade twelve graduation. Tom's parents considered that he was doing "about the same as most other children the same age" in his schoolwork and considered that he would end his formal education with high school graduation (PATES). When asked to speculate on Tom's future employment, the Underwoods gave "accountant or office worker" as their response.

Mr. and Mrs. Underwood had generally positive attitudes toward education and schooling. They had sent both Tom and his brother to kindergarten, and their PATES score of 88 (compared to class parent mean score of 77.04) was equal fourth highest in the class. According to their responses on the PATES, they "strongly agreed" that "Going to school is a profitable experience," that their years in school were well spent, and that "The best way to get a good job is to get a good education." In fact, 87.5 percent of the Underwood's responses to the PATES statements reflected "strongly" or "somewhat" positive attitudes toward education. None of their attitudes was "strongly" negative, although they "somewhat" agreed that "Too much nonsense goes on in classrooms theyse days," and that "Schools should spend more time than they do teaching boys and girls how to be useful citizens" (PATES).

Tom's attitudes toward his parents appeared to be very positive. He was one of five pupils in Room 1 to achieve a maximum score on the SEI attitude to home factor (Table 78). According to the individual items on this factor, Tom had "a lot of fun" with his parents, they understood him, they were considerate of his feelings, and they never tried to put pressure on him to achieve. Furthermore, Tom did not agree that there were "many times when I'd like to leave home."

According to the results of various attitude questionnaires administered in May, 1976, Tom also had generally positive attitudes toward school. From the MCI satisfaction with the class factor in Table 76 (see p. 456), Tom appears to have been quite satisfied with his class, although not in a strongly positive way. According to individual items in that factor, Tom agreed that "Most pupils like the class," "Children seem to like the class," and "The class is fun." On the other hand, he also agreed that "Some pupils don't like the class," "Some pupils are not happy in class," and disagreed with the statement that "Most children say the class is fun." The ambivalence of these responses is echoed by Tom's answer to the open-ended PCAS question. "Which class would you rather be in at your school?" -- Tom's response was "None." From this answer it is not clear whether Tom would have rather stayed in his own class, or not been in any class at all. He did not respond to the secondary question "Why?"

| Instrument | Factor | | | Complete instrument | |
|---|---|---|---|---|---|
| | Title | Tom's score (max) | Class mean (SD) | Tom's score (max) | Class mean (SD) |
| WSAT | general school attitude | 22 (33) | 24.56 (3.54) | 104 (138) | 101.80 (9.44) |
| SEI | attitude to home (parents) | 16 (16) | 11.60 (3.88) | 90 (100) | 70.16 (14.59) |
| | attitude to school (academic) | 14 (16) | 9.92 (3.32) | | |
| PCAS | attitude to school | 2 (6) | 3.00 (1.55) | 61 (84) | 47.84 (9.20) |
| | importance of doing well (school) | 4 (10) | 6.88 (1.53) | | |
| | anxiety in the classroom[a] | 4 (6) | 3.52 (1.45) | | |

[a] high score = less anxious

Table 78. Attitudes of Tom and his classmates toward selected home and school factors.

The PCAS attitude to class factor (Table 76) is closely related to the MCI satisfaction with class factor, yet Tom's responses were much more positive on the former measure. An examination of the individual items of this PCAS factor shows that seven of the eight items are phrased to determine the respondent's attitudes directly towards the class. On these items, Tom recorded the maximum score possible. The eighth item required a response to the statement "I think a lot of children of my age would like to be in my class": Tom's answer was a realistic "not sure." Tom's score on the total factor was equal highest in the class.

Another PCAS factor (Table 76) indicated that Tom had the highest interest in schoolwork in his class. According to individual items in this factor, Tom disagreed that "At school they make you do things you don't want to do," and agreed that he "enjoyed most schoolwork," and that he had interesting lessons most of the time. On the other hand, he felt that school lessons were sometimes boring and that, although he sometimes liked doing hard arithmetic questions, sometimes too much time was spent doing arithmetic.

This indication of a positive attitude toward schoolwork is supported by the WSAT student-instruction interaction factor (Table 76). Several items in this factor are directly related to the PCAS factor discussed immediately above. For example, Tom agreed that his teachers made class interesting and made it fun to learn, and that he liked the thungs he did in his school "some of the time." This moderately positive response was sustained throughout most of the items in this factor related to schoolwork.

Other items in the WSAT factor presented in Table 76 refer directly to teachers. Tom's responses to these items were slightly more positive, and Tom's overall score on this factor was the fifth highest in the class. Tom's only wholly negative response to the 26 items in this factor was to record "not very often" in reacting to the statement that "In learning our lessons in class, we do most of the talking." Typical of his most positive responses was "most of the time" to the statements "My teachers are glad to work with us" and "My teachers like children."

The WSAT items referred to immediately above are clearly linked to the PCAS relationship with teacher factor also presented in Table 76. Tom was the only pupil to record a maximum score on this factor. According to his responses to individual items, Tom felt he enjoyed a very positive, friendly, and happy relationship with his teacher. His perception in this regard at least seemed to be corroborated by Mr. Corbett who commented:

> I feel that Tom could benefit by participating in class discussion more. He is a pleasant and courteous student to teach (Pupil Report Card F).

In addition to attitudes toward class-related factors, Tom's attitudes toward school in general were also measured. From Table 78, it is seen that there is apparently conflicting evidence concerning Tom's attitudes toward school. Whereas Tom's response to the WSAT general school attitude factor is moderately positive, it is below the class mean score. The PCAS attitude to school factor indicates still less positive attitudes. But both of these factor scores are in sharp contrast to the score achieved by Tom on the SEI attitude to school-academic factor.

A closer examination of these three factors provides an explanation for this apparent contradiction. Whereas the WSAT and PCAS factors relate essentially to general school matters, the SEI factor really focuses on attitudes toward class-related matters and, in this respect, is more similar to the PCAS interest in schoolwork factor (see Table 76). According to individual items on the WSAT, for example, Tom chose "Not very often" in his responses to "My school is beautiful," "My school is a happy place to be," and "I like my school." Similarly, for individual items on the PCAS, he agreed that "I bet going out to work is better than school," and that "School is noisy" and "School is fun" only "some of the time." Also, he was "not sure" if he "liked school."

In contrast to these rather negative responses, Tom gave positive responses to seven of eight items on the SEI attitude to school-academic factor. On this factor, Tom agreed with the statements "I'm proud of my schoolwork" and "I'm doing the best work that I can." Also, he disagreed with "I often feel upset in school," "My teacher makes me feel I'm not good enough," and "I often get discouraged in school. School often seems hopeless to me." Again, these items and generally positive responses are rather similar to the PCAS interest in schoolwork factor noted in Table 76.

An examination of the interview conducted with Tom at the end of the Shadow Study observation provides little additional information concerning his attitudes toward his class or his school. His answers were generally monosyllabic and lacking in explanatory comment, in spite of encouragement and gentle probing on the part of the interviewer. For example:

Interviewer: Do you like school?

Tom : Yes.

Interviewer: What are the things you enjoy best about school?

Tom : Learning things.

Interviewer: Do you like learning things?

Tom : Yes.

Interviewer: What things in particular would you like to learn about?

Tom : Grammar (long pause)

Interviewer: Games? Sports? Maths?

Tom : Yes.

Interviewer: Music

Tom : No.

Interviewer: What do you dislike about school -- are there things that you can't stand?

Tom : No.

Tom also answered "No" when asked if there were any things in school that made him angry, mad, or annoyed. He admitted that music bored him, but nothing else. He agreed that some things in school frustrated him, but could not think of any specific items. Finally, he answered "I don't know" when asked if there were things about school that excited him.

Earlier in the interview, Tom had said that, if given the option, he would attend school voluntarily because he wanted to finish school and "If I didn't go to junior high I wouldn't know anything about high school -- I couldn't do the hard work" (Shadow Study Interview F). Thus, it appears that Tom had generally somewhat positive attitudes toward school, but more particularly so toward his class. The fact of his providing so few details during the Shadow Study interview may be due in part to a lack of clarity in Tom's own thinking, that is, in his failure to separate school-related factors from class-related factors in his own mind. Also, he was apparently ill-at-ease during the interview, and the interviewer noted that he was "Not a sociable kid -- quiet and shy" (Shadow Study Summary, F).

Tom's scores on the two remaining PCAS factors in Table 78 seem somewhat complementary. According to one factor, Tom was not very convinced of the importance of doing well at school (his score was more than one standard deviation below the class mean). According to the second factor, he was not particularly anxious in the classroom situation (only six classmates were less anxious, but 10 were more anxious), in spite of indifferent academic achievement. His lack of effort earlier in the year had been noted by Mr. Corbett and one other teacher, and his lack of participation in classroom discussions and events was noted by several teachers including Mr. Corbett (School Progress Report, F).

In summary, the home situation for Tom seems to have been very settled and supportive. In return, Tom appears to have had very positive attitudes toward his parents and home life. Tom appears not to have been an anxious or highly motivated student,. He was not very convinced of the importance of high academic achievement at school and, in fact, was not a very active participant in classroom activities and discussions. He appears to have had somewhat mixed attitudes toward his general school experiences, but highly positive attitudes toward class related factors. Reasons for this apparent discrepancy are not clear at this time. The next sections of this chapter will bring to light several other areas related to Tom's classroom and school experiences.

## The social setting

The 26 pupils in Mr. Corbett's grade six class were evenly divided into 13 girls and 13 boys. Twnety of these children had been born in Alberta communities other than Westham, three had been born in other Prairie provinces, one in eastern Canada, and two in Britain. The parents of two of the pupils were comparatively recent immigrants from Europe and retained non-English languages in the home situation.

According to the occupation of their fathers, Mr. Corbett's pupils came from a wide range of socio-economic backgrounds (Blishen scores ranged from 28.22 to 74.34 with a mean of 47.7). The fathers' occupations included various skilled trades, managerial positions in corporations and companies, engineering, and teaching. Most of the mothers were solely homemakers, but seven worked part- or full-time in selling real estate, secretarial positions, and nursing. Most families gave Protestant or a sect of Protestantism as their religious affiliation, but three families gave no religion, and one gave Roman Catholic.

When asked to comment on the social development of his class, Mr. Corbett considered that in comparison with other grade six classes he had taught, his present class was:

> A little more sophisticated . . . socially aware ... a little more socially attuned. In terms of getting along with one another I don't see any real differences, except in that this class in comparison with other classes has a little more difficulty in forming groups to do something together -- to be able to sit down and plan something and to work cooperatively towards some particular goal or some project (Teacher Interview F, Part 1).

On one occasion a classroom observer was favourably impressed with the degree of cooperation and support the class gave Mr. Corbett in his attempts to involve one of the less able students in a public academic interaction. Upon the target student successfully answering the question, the class "applauded -- not in a negative 'making fun' sort of way but rather ... in a spontaneous, relaxed, and genuine fashion" (Anecdotal Notes F, 1). On some of the occasions when the class was working in small groups, the same observer noted that some pupils seemed to move naturally into acceptable leadership roles. Some pupils were disruptive in such settings, however, and one girl "was very loud and aggressive ... (and) constantly tried to dominate her group during the 'quiet exercise'" (Anecdotal Notes F, 1). These observations lend some support to Mr. Corbett's comments noted earlier. It should be recognized, of course, that Mr. Corbett's comments may have reflected his view of the class' behaviour earlier in the year, whereas the investigator's observations were made toward the end of the school year, and presumably he was observing improved pupil behaviours.

In Mr. Corbett's opinion, his class experienced "difficulty in forming groups to do something together" partly because the system of platooning meant that he was with his class for language arts lessons only. Other, specialist teachers taught the class for all other subjects -- thus reducing the amount of contact and influence Mr. Corbett may have had with his class (Teacher Interview F, Part 1). Also, he noted that the wide range of academic ability may have presented problems in the children's group work. And, finally, he mentioned that there were "cliques" in the class which, although not rigid and unchanging, were sufficiently strong to give rise to interpersonal rivalries when pupils from diffirent cliques were grouped for classroom learning purposes. An additional factor which may have been related to interpersonal relationships within Mr. Corbett's class was that many of his pupils apparently had friends who were members of the other grade six classes at Napier. Both Mr. Corbett and a classroom observer noted that Mr. Corbett's pupils played and interacted with pupils from other classes at recesses and lunch-times.

From Table 78 (see p. 479) it appears that according to the WSAT and PCAS factors, Mr. Corbett's class had a generally favourable attitude toward school. The SEI attitude to school-academic factor reveals a somewhat less positive attitude toward the class, however. In contrast to most of his peers, Tom had a less positive attitude toward school but a more positive attitude toward the class. Furthermore, he felt less anxious than his classmates in the classroom situation.

The fact of Tom's social singularity noted above is reinforced by the results of attitude questionnaires contained in Table 79. Although Tom had higher than mean scores in agreeing that friction and competitiveness existed in his class, he similarly showed greater agreement that there was cohesiveness in his class (MCI). Twenty-four of 25 pupils agreed that "some children don't like other children" in the class, a point of view that was reinforced by 23 of 25 pupils who agreed that "some people in my class are not my friends." But only four pupils agreed with the extreme statement that "children in our class fight a lot." For each of these items, Tom's response was with the majority of his classmates:

The class responses to individual items in the MCI competitiveness factor provide contradictory evidence of competitiveness. Whereas 20 of 25 students agreed that "Some pupils feel bad when they do not do as well as the others," 20 students also agreed that "most children don't care who finishes first." Most children agreed, however, that "Some pupils always want to do their best" and that in fact "Some pupils always do better than the rest of the class." On each of these items Tom was in agreement with the majority response.

| Instrument | Factor | | | | Complete instrument | |
|---|---|---|---|---|---|---|
| | Title | Tom's score (max) | Class mean | (SD) | Tom's score (max) | Class mean (SD) |
| MCI | friction | 23 (27) | 20.44 | (3.32) | 93 (135) | 91.96 (6.89) |
| | competitiveness | 21 (27) | 19.72 | (3.83) | | |
| | cohesiveness | 19 (27) | 18.44 | (3.23) | | |
| WSAT | interpersonal relations | 19 (27) | 18.48 | (2.00) | 104 (138) | 101.80 (9.44) |
| SEI | social self-esteem | 12 (16) | 12.00 | (2.99) | 90 (100) | 70.16 (14.59) |
| PCAS | social adjustment to others | 4 (5) | 2.84 | (1.08) | 61 (84) | 47.84 (9.20) |

Table 79. Attitudes of Tom and his classmates toward selected factors related to the social setting of Room 1.

Mr. Corbett's comments concerning the difficulties his pupils experienced in organizing themselves for group work is reflected in the comparatively low scores on the MCI cohesiveness factor (Table 79). An examination of individual items in this factor shows that only two of 25 children agreed that "All pupils in my class are close friends." Similarly, only 3 children agreed that "All of the pupils in my class like one another." In response to a more personal question, five of 25 pupils agreed that "In my class everybody is my friend." In spite of these generally rather negative responses, 21 children agreed that "In my class I like to work with others." For all of these items, Tom's responses were in agreement with the majority of his classmates.

Whereas many of the items included in the MCI questionnaire ask respondents for their opinions of what attitudes their classmates have, the WSAT items are more personal. For example, in the WSAT interpersonal relations factor, 21 (including Tom) of 25 students agreed with the statment "I like my school friends -- most of the time," with the remaining four pupils agreeing "some of the time." These highly positive responses seem to be specific for the respondents' chosen friends, for in response to the statement "All the people at my school are friendly," only one child answered "most of the time", 10 pupils, including Tom, responded "some of the time," and 14 responded not very often." Perhaps quite typical of Tom and his classmates were the 14 "some of the time" responses to each of the two items "The children in my school are good to me," and "The pople in my school like to listen to me." The remaining responses for the first statement were almost evenly divided between more positive and less positive responses, but for the second statement most of the remaining responses were less positive.

In spite of the often catious, if not negative, responses to the MCI and WSAT factors in Table 79, according the SEI factor, Mr. Corbett's pupils maintained fairly high social self-esteems. Items contained in this factor indicate that almost all of Mr. Corbett's pupils agreed that "I'm liked by kids my own age," but disagreed with "I don't like to be with other people" and "Kids pick on me very often." Tom's responses to these items were in agreement with the majority of his classmates. In addition, Tom agreed that he was "easy to like" and that he was "a lot of fun to be with." Tom acknowledged, however, that other children did not usually follow his ideas, and that most people were better liked than he.

The final measure in Table 79 is the PCAS social adjustment factor. According to the individual items in this factor, over two-thirds of the children (including Tom) felt that they had friends in the class to play with, and that they had playmates for recess time. Less than half the class (including Tom) thought that they were liked by other children in the class, and 22 of 26 pupils were "not sure" (Tom's response) or agreed with the statement that "I don't always get on well with some of the children in my class."

From Table 79 it is seen that Tom's social adjustment score was considerably higher than the class mean in spite of some apparent doubt concerning the degree of friendship he may have had with his classmates as individuals. Tom's comparatively high level of social adjustment seems to be related to the fact of his having staunch and regular friends (even though few in number) among his classmates, and very good relations with his twin brother and extra-class friends -- particularly noticed at recess times. This interpretation is supported by the Shadow Study observer who noted that Tom consistently played with classmates Peter, Doug, and Danny, his own twin brother, and a few other boys during recess periods. This observer also recorded the following dialogue from an interview with Tom:

> Interviewer: Those three (Peter, Doug, and Danny) particularly are your friends. What about the class as a whole -- are these other students that are your good friends that aren't in the class?
>
> Tom: Yes.
>
> Interviewer: In other classes?
>
> Tom: Yes.
>
> Interviewer: Are some of them in this class?
>
> Tom: None.
>
> Interviewer: Do they go to this school?
>
> Tom: Two of them.
>
> Interviewer: The other two live in your neighbourhood.
>
> Tom: Yes. (Pupil Interview, F).

The same observer also noticed during the course of the Shadow Study that Tom very seldom interacted verbally with anyone while in school. He raised his hand only once to respond to a teacher's question (but was not selected as the respondent). He did not otherwise interact with any of his teachers (Mr. Corbett and the specialist teachers for music and social studies). On only two occasions was he seen to talk with other students in class (he discussed a test result with Peter and Doug, and spoke to one other boy while in line waiting to enter the music room). The observer noted:

> Not once during the five periods of language arts with the homeroom teacher (Mr. Corbett), or during the social studies lesson did I notice him (Tom) talking

> with anyone. Even at recess, the game he spent most of his time playing was done without much conversation. He did talk with his twin brother a bit, and with Peter most of the time. Not a sociable kid - quiet and shy. (Shadow Study Summary F).

Mr, Corbett also described Tom as "really quiet" while discussing the social standings of his pupils (Teacher Interview F, Part 1). In another context, Mr. Corbett explained that he would like to keep Tom in his class for one more year in order to work with him:

> To see if we could get him to come out of his shell. I know he's fairly quiet and I know that people are -- withdrawn isn't the word -- but a little introverted, and in Tom's case that is somewhat so. But he really does lack confidence expressing himself. I think, in the right circumstances which I can provide and I think I do provide, that he could improve in that area -- he could come out of his shell more. I think he should before he goes to junior high (Teacher Interview F, Part 2).

Further information concerning the social structure of Mr. Corbett's class was obtained from a written sociometric test and is presented in Figure 34. From this figure it is apparent that there were no first place choices between the sexes on any of the three items measured ("who would you chose to sit near, to work with, and to play with"). Also, one boy and four girls received no first place choices on those measures. Two boys (numbers 14 and 4) and one girl (number 21) attracted most first place choices from their peers. Tom (number 22) was chosen by Peter (number 9) on all three measures, and similarly chose Peter in return. Tom also received one first place choice from Doug (number 17).

In addition to the sociometric information concerning Tom presented in Figure 34, Table 80 summarizes and presents comparisons among Tom's verbal reports of friends (Pupil Interview F) and his observed social interactions (Shadow Study F). From Table 80 it is evident that

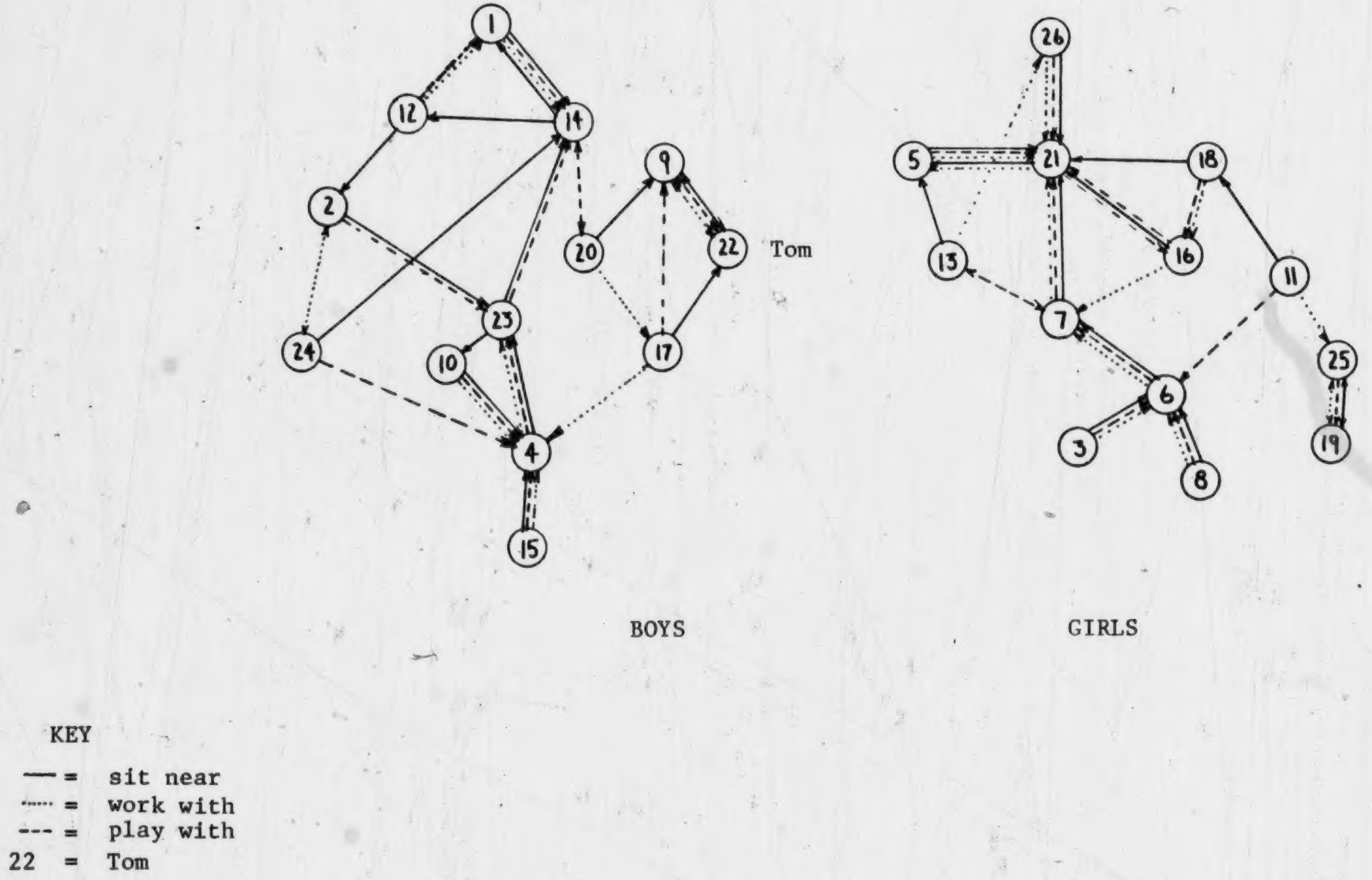

1
12
14
2
9
20
22
Tom
23
24
10
17
4
15
BOYS
26
5
21
18
13
16
11
7
25
6
3
19
8
GIRLS
KEY
— = sit near
····· = work with
--- = play with
22 = Tom

Figure 34

Sociogram of Mr. Corbett's
Grade Six Class based on first choices of three Measures.

| Test item | | | Classmates identified by ID number and sex | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 9<br>M | 10<br>M | 15<br>M | 17<br>M | 19<br>F | 23<br>M | 24<br>M |
| 1. sit near | | | | | | | | | |
| | a | written test | 1st | | | 2nd | | | 3rd |
| | | pupil interview | 1st | | | 2nd | | | 3rd |
| | | Shadow Study | 3 | 1 | 1 | | | | |
| | b | written test | 1st | | | 1st | | | |
| | | Shadow Study | 2 | 1 | | | | | |
| 2. work with | | | | | | | | | |
| | a | written test | 1st | | | 2nd | | | 3rd |
| | | pupil interview | | | | 3rd | | 1st | 2nd |
| | | Shadow Study | 2 | | | | | | |
| | b | written test | 1st | | | | | | 3rd |
| | | Shadow Study | 1 | | | | 1 | | |
| 3. play with | | | | | | | | | |
| | a | written test | 1st | | | 2nd | | 3rd | |
| | | pupil interview | 1st | | | 2nd | | | 3rd |
| | b | written test | 1st | | | | | | |
| 4. actually play with | | | | | | | | | |
| | a | written test | 1st | | | 2nd | | | 3rd |
| | | pupil interview | 1st | | | 2nd | | 3rd | 4th |
| | | Shadow Study | 1 | | | | | | |
| | b | written test | 1st | | | | | | |
| | | Shadow Study | | | | 1 | | | |

a = Tom's choice; b = chosen by classmates

Notes: Ranking indicates order given (written test) or mentioned (interview). Cardinal numbers indicate number of times behaviours observed.

Table 80. Comparisons among the sociometric verbal tests, interview report of friends, and observed social interactions of Tom.

there is considerable agreement among the various data sources confirming that Tom's social contacts hardly existed outside of his very strong links with Peter, Doug, Danny and to a lesser extent, Guy. There are few inconsistencies among Tom's social preferences, the most notable being in the selection of a workmate: whereas Tom chose Peter on the written test, he omitted Peter during the Pupil Interview and chose Guy in his place. When asked for a reason for not choosing Peter, Tom replied:

> Peter -- I work with him sometimes, but he starts fooling around (Pupil Interview F).

In interpreting Table 80 it is important to recognize that the Shadow Study data are largely inferential -- this is particularly true for the first item, "Sit near." Tom and Peter were observed to be sitting next to each other on five occasions during the Shadow Study time samples. This comparatively large number of observed behaviours combined with the boys' stated preferences for each other, may be regarded as greater-than-coincidental evidence of the friendship that existed between the boys. The tabulation of one occasion when Tom sat next to Adele (number 19), however, is atypical of Tom's behaviour, is not supported by any other data, and may reasonably be regarded as incidental and not of significance in Tom's social behaviour. (In fact, during the Pupil Interview when asked if he had friends who were girls, Tom replied "No" and added that he did not like girls). The tabulation for the one occasion when Tom was observed seated next to Gary (number 15) may also be regarded as incidental for lack of further evidence. But Martin (number 10) was one of the few pupils with whom Tom spoke in school during the Shadow Study day and, although no further evidence of friendship was recorded, it is possible that their association was more than incidental.

In summary, it seems reasonable to say that Mr. Corbett's class was not a closely knit social unit. Although there was little evidence of animosity or even unpleasantness among the children, neither was their strong or consistent evidence of preference for the company of classmates over others, or of pleasant social interaction amongst the children in the class setting. The lack of class cohesiveness was also evident in the lack of social interaction or preference between boys and girls (see Figure 34).

Tom has been described as socially "really quiet" by his teacher and "not a sociable kid" by a classroom observer. From the information obtained from various sources and presented in this section, it is evident that although Tom was not gregarious in the sense of having many friends with whom he interacted closely, his friendships were constant, consistent, and active and they were important to him. When asked to describe his classmates as a group, Tom said "They're friendly kids" and stated that he liked them (Pupil Interview F). Tom's apparently positive attitudes towards his class and his higher than average scores on the social adjustment (PCAS) and interpersonal relations (WSAT) factors (see Table 79, p. 488) seem to indicate that, whether being in Mr. Corbett's class was or was not a really positive experience in itself, it at least provided a non-threatening environment in which Tom could feel reasonably secure. With this basic security, Tom was able to enjoy the close relationship of his few classroom friends, especially in the playground where his circle of friends was increased and he was able to play physically active games -- one aspect of school about which he felt very positive.

## Academic attributes, ability, and achievement

An interview was conducted with Mr. Corbett on May 10, 1976 in order to gather his impressions and opinions concerning his pupils. When asked to describe the academic ability range and scholastic achievements of his class, Mr. Corbett commented:

> I think there is quite a wide range in the class-- of ability. There appear to be four or five students that you would call top students ... one that is a particularly top student, and three or four others that are very good students. There are a number of students that are having difficulties -- last year a number of them were in a remedial class. These kids seem to have more difficulty and would call them ... low students (Teacher Interview F, Part 1).

Mr. Corbett further explained that there was not a large group of average ability students in his class and, although there was some polarization in ability levels, there were few high achieving students-- a state of affairs which "leads to certain problems."

Mr. Corbett's general assessment of his class as below average is supported by the results of the CLT administered in June, 1976 and reported in Table 81. From Table 81 it is seen that the mean total DIQ score for the class was 104.56 (SD = 9.49), with a range from 81.5 to 119.5. But, perhaps more significant (especially for Mr. Corbett, since he taught his homeroom class language arts), was the verbal DIQ mean score of 97.72 (SD = 11.34) -- more than 13 points lower than the non-verbal DIQ mean score.

The significance of the low verbal DIQ score and Mr. Corbett's reference to "certain problems" noted above is to be found in part in Mr. Corbett's comment that:

> There is some difficulty for me as a teacher in working with kids (i.e., his class) in discussion groups ... I think it is partly the range of ability, but it is also their individual ability levels. They haven't seemed to acquire discussion skills, where I like to operate in a discussion manner quite a lot (Teacher Interview F, Part 1).

| Item | Tom |  | Class (N = 26) |  |  |
|---|---|---|---|---|---|
|  | value | rank[a] | mean score | (SD) | range |
| verbal D.I.Q. | 115 | 2nd (1) | 97.72 | (11.34) | 73 - 122 |
| age equivalent (months) | 161 |  |  |  | 112 - 178 |
| grade equivalent | 8.1 |  |  |  | 4.2 - 9.2 |
| grade percentile | 91 |  |  |  | 5 - 97 |
| nonverbal D.I.Q. | 100 | 20th (1) | 110.80 | (11.83) | 77 - 130 |
| age equivalent (months) | 140 |  |  |  | 112 - 216 |
| grade equivalent | 6.4 |  |  |  | 4.1 - 11.4 |
| grade percentile | 59 |  |  |  | 16 - 99 |
| total D.I.Q. | 107.5 | 10th | 104.56 | (9.49) | 81.5 - 119.5 |

[a] figure in parentheses indicates number of classmates achieving rank equal to Tom's.

Table 81. Tom's results and class rank, with class means, standard deviations, and ranges on selected items of the Canadian Lorge-Thorndike Intelligence Test (Level D, Form 1), June, 1976.

From Table 81 it is seen that Tom's verbal DIQ score was 15 points higher than his nonverbal score. Although Tom's verbal DIQ score (115) was not particularly high, it ranked second highest in the class. His nonverbal score (100) ranked twentieth. This differential in Tom's verbal and nonverbal attributes was also revealed in his scores on the MAT in September, 1975 (Table 82). From Table 82 it is seen that Tom's verbal scores resulted in a total reading rank of equal sixth in the class, whereas his total mathematics rank was fifteenth.

The results of the re-testing of the MAT in June, 1976 appear to confirm Tom's comparative superiority over the majority of his classmates in important verbal skills. From Table 83 it is seen that in his class Tom ranked from second (reading) to thirteenth (spelling) on these kills, achieving third place on the total reading measure. It is also important to note that in his grade six year, Tom's grade equivalence as measured by the two forms of the MAT, showed increases ranging from .7 (spelling) to 2.8 (reading), with an improvement of 2.2 (to a grade equivalence of 8.4, compared to the class mean of 6.5, SD = 1.2) on the total reading measure.

In spite of the results of the various attribute and achievement measures in verbal and language skills presented above, Mr. Corbett had a low perception of Tom's ability in language arts in comparison with his classmates. Mr. Corbett's ranking of Tom as twentieth in his class in language arts was recorded in May, 1976 -- almost four weeks before the second MAT was administered, and is summarized in Table 84. It is also interesting to note from Table 84 that when asked to rank his pupils according to the extent to which he thought they would do well in school, Mr. Corbett ranked Tom twenty-third out of the twenty-six children in the class.

| Item | Tom | | Class (N = 23) | | | | |
|---|---|---|---|---|---|---|---|
| | std. score | rank[a] | grade equiv. | mean score | (SD) | mean gr. equiv. | (SD) |
| word knowledge | 79 | 9th (1) | 6.0 | 77.48 | (7.31) | 5.8 | (1.3) |
| language | 79 | 16th (2) | 5.3 | 82.74 | (7.24) | 6.0 | (1.2) |
| reading | 84 | 5th (3) | 6.5 | 77.65 | (9.53) | 5.6 | (1.4) |
| spelling | 79 | 13th (1) | 5.6 | 78.00 | (13.82) | 5.7 | (2.0) |
| total reading | 82 | 6th (3) | 6.2 | 77.44 | (8.46) | 5.6 | (1.2) |
| math computation | 84 | 16th (2) | 5.7 | | | 6.2 | |
| math concepts | 80 | 16th (2) | 5.5 | | | 6.4 | |
| math problems | 89 | 10th (1) | 6.5 | | | 6.2 | |
| total math | 88 | 15th | 5.7 | | | 6.1 | |

[a] figure in parentheses indicates number of classmates achieving rank equal to Tom's.

Table 82. Tom's standard scores, class rank, and grade equivalents, with class means and standard deviations, on selected items of the Metropolitan Achievement Test (Form F), September, 1975.

| Item | Tom | | | Class (N = 26) | | | |
|---|---|---|---|---|---|---|---|
| | std. score | rank[a] | grade equiv. | std. score | (SD) | mean gr. equiv. | (SD) |
| word knowledge | 90 | 4th | 7.9 | 82.76 | (6.45) | 6.7 | (1.2) |
| reading | 97 | 2nd | 9.3 | 82.32 | (8.46) | 6.4 | (1.5) |
| total reading | 94 | 3rd | 8.4 | 83.00 | (7.20) | 6.5 | (1.2) |
| language | 88 | 9th (1) | 7.0 | 85.56 | (6.38) | 6.5 | (1.2) |
| spelling | 82 | 13th | 6.3 | 82.00 | (13.32) | 6.2 | (1.9) |

[a] figure in parentheses indicates number of classmates achieving rank equal to Tom's

Table 83. Tom's standard score, class rank, and grade equivalents with class means and standard deviations, on selected items of the Metropolitan Achievement Test (Form G), June, 1976.

The reasons for the discrepancy between Tom's performance on the various standardized tests of verbal skills, and Mr. Corbett's perception of Tom's achievements in language arts are not clear. Standardized tests may not, of course, necessarily measure a student on topics, skills, or material which a teacher has stressed in class -- the results of such tests may therefore be misleading. Further information concerning Mr. Corbett's assessment was obtained and is summarized in Table 85.

Projected rank in class (N = 26)

| item | rank |
|---|---|
| language arts | 20th |
| overall | 23rd |

Table 84. Tom's rank in class according to Mr. Corbett's perceptioin of his students' achievements on selected measures, May, 1976.

From Table 85 it is evident that although Mr. Corbett perceived Tom to be of "average" academic ability and to be "interested" in the classroom teaching situation, he perceived Tom to be "below" the expectations he had for Tom's achievements in language arts. In fact, on this measure, he ranked Tom twenty-fourth in the class.

In order to assess Tom's academic accomplishments as perceived by his teachers -- especially Mr. Corbett -- on their criteria, an examination was made of Tom's School Progress Report. The report card evaluations as made by each subject teacher are contained in Table 86 and include assessments for "achievement" and "effort" for all subjects taught in the curriculum. From Table 86 it is seen that Tom's scores were below the mean in all subjects for which class means were obtained, with the exception of social studies "effort." Furthermore, he showed little or no improvement in his scores for all subjects except oral French, physical education, and art. Most notably, Tom apparently showed no appreciable improvement in his efforts or achievements in mathematics, and showed only a minimal improvement in these aspects of language arts.

| Item | Placement of pupils on various 5-point scales (N = 26) | | | | |
|---|---|---|---|---|---|
| perceived achievement level of expectations for LA | 2 greatly exceeded | 6 exceeded | 11 met | 7 below -- 5th[a] | far below |
| perceived attitude toward classroom teaching | 4 enthusiastic | 18 uninterested[a] | 11 passive | 3 uninterested | resistant |
| assessment of academic ability | 3 very bright | 6 bright | 12 average[a] | 5 below average | dull |

[a] indicates Tom's placement

Table 85. Mr. Corbett's placement of his pupils on various 5-point scales according to his perceptions of them on selected measures, May, 1976.

| Item | Max. score | Winter, 1975 | | | Summer, 1975 | | |
|---|---|---|---|---|---|---|---|
| | | Tom's total scores | class mean | (S.D.) | Tom's total scores | class mean | (S.D.) |
| group participation[a] | 16.0 | 9.0 | 9.50 | (2.75) | 9.0 | 10.74 | (2.76) |
| individual participation[a] | 16.0 | 8.0 | 9.29 | (2.28) | 8.0 | 9.76 | (2.55) |
| working skills[a] | 12.0 | 5.0 | 6.42 | (2.60) | 5.0 | 6.96 | (2.51) |
| LA effort[a] | 24.0 | 11.0 | 14.17 | (4.00) | 12.0 | 15.14 | (3.70) |
| LA achievement[a] | 24.0 | 10.0 | 13.38 | (4.18) | 11.0 | 14.42 | (4.22) |
| Math effort | 4.0 | 2.0 | 2.56 | (0.85) | 2.0 | 2.50 | (0.94) |
| Math achievement | 4.0 | 2.0 | 2.25 | (1.03) | 2.0 | 2.23 | (0.95) |
| Science effort | 4.0 | 2.0 | 2.46 | (0.51) | 2.0 | 2.38 | (0.57) |
| Science achievement | 4.0 | 2.0 | 2.29 | (0.46) | 2.0 | 2.31 | (0.55) |
| Social Studies effort | 4.0 | 2.0 | 2.24 | (0.6) | 3.0 | 2.85 | (0.66) |
| Social Studies achievement | 4.0 | 2.0 | 2.22 | (0.58) | 2.5 | 2.67 | (0.68) |
| oral French effort | 4.0 | 1.0 | | | 2.0 | | |
| oral French achievement | 4.0 | 1.0 | | | 2.0 | | |
| P.E. effort | 4.0 | 2.5 | | | 3.0 | | |
| P.E. achievement | 4.0 | 2.5 | | | 3.0 | | |
| Art effort | 4.0 | 2.0 | | | 3.0 | | |
| Art achievement | 4.0 | 2.0 | | | 3.0 | | |
| Music effort | 4.0 | 2.0 | | | 2.0 | | |
| Music achievement | 4.0 | 2.0 | | | 2.0 | | |

[a] marks awarded by Mr. Corbett

Note: total class scores were not available for some items

Table 86. Tom's scores for "effort" and "achievement," with class means and standard deviations, obtained from the School Progress Report .

From the data presented to this point in this section, it appears that Tom either had little ability or little motivation to achieve well in most academic subject areas. In language arts, however, the evidence (the verbal DIQ results and the MAT results of June, 1976) indicates that although Tom had the attribute to achieve well and did in fact achieve high scores on standardized tests, Mr. Corbett perceived him as a low achiever. In order to provide further insight into Tom's academic achievements and attitudes as perceived by his teachers, the comments entered into the School Progress Report in January, April, and June, 1976 are reproduced below:

> I feel that Tom could benefit by participating in class discussion more. He is a pleasant and courteous student to teach (Mr. Corbett, January, 1976).
>
> Tom still must be encouraged to participate in class discussions. Of late, though, there has been some improvement in this. (Mr. Corbett, April, 1976).
>
> Tom must make a more determined effort to complete assignments. If he has problems he should approach me for help. Often he is reluctant to do this. I have seen more willingness on Tom's part to participate in discussions lately. (Language arts, January, 1976).
>
> Tom has applied himself more this term in the area of reading. Though he can determine the main idea of a selection and can see cause and effect relationships, he still has some difficulty in determining between fact and opinion and drawing conclusions. With a greater effort, I'm quite sure that Tom would be able to express himself, in written form, much more clearly. (April, 1976).
>
> Tom's reading skills have improved during this past term, but continued hard work will be required to overcome some areas of weakness in reading. Best wishes for a successful year in grade seven next year. (June, 1976).
>
> Tom is very steady worker. He has some difficulty with math but with his attitude and good work habits he is making steady progress. Problem-solving skills in need of improvement. (January, 1976).

Tom is interested in science and participates effectively in science activities. His reporting skills are weak. (January, 1976).

I am pleased with Tom's work at this time (social studies, January, 1976).

Tom is progressing steadily and works well in class. However, I would like to see more participation in class discussions (April, 1976).

French does not come easily to Thomas, however, I would like to see more of a concentrated effort on his part. Effective participation in need of improvement. (January, 1976).

I can see a small improvement in Thomas' attitude in class. Keep trying to improve your participation efforts Tom (oral French, April, 1976).

Tom seems to apply himself in P.E. and should continue to improve!! (Physical education, January, 1976).

Good work Tom! (Physical education, April, 1976).

Best of luck in Jr. High Tom!! (Physical education, June, 1976).

Thomas works hard and his results are quite good. (Art, January, 1976).

Great improvement, Thomas. (Art, April, 1976)

Keep it up, Tom. (Art, June, 1976)

Theory 66%. Progress in recorder skills satisfactory (Music).

An examination of the report card comments indicates that, in academic subjects, there was a high degree of consensus among Tom's teachers that he should participate more in class discussions and activities and, further, that he should display more effort. Among the academic subjects, the only exception to this summary is in mathematics, where Tom's attitude and work habits were praised. Some teachers indicated Tom's specific areas of weakness in their subjects. These weaknesses included the proper interpretation of written passages in English, reading in English, problem-solving skills in mathematics, and reporting skills in science. Almost all teachers expected Tom to improve in their subject area, and they indicated that improved effort would result in his eventual success.

From Mr. Corbett's report card comments it appears that he suspected that Tom had considerably more ability in language arts than was evident from his work. Reasons for Tom's failure to produce good work during class time and for classroom assignments are still not clear, however. During a teacher interview following a language arts lesson (Teacher Sort Task F, 2), Mr. Corbett indicated that Tom was one of a number of students who were unable to grasp a point in the lesson, even though he was paying attention. During the same lessons, Mr. Corbett attempted to discuss the learning problem with Tom, but found him hesitant and unable or unwilling to communicate satisfactorily.

During an interview following another language arts lesson, Mr. Corbett selected Tom as one of two boys in the class who during the lesson remained "kind of out of the picture for me" (Teacher Sort Task Interview F, 1). Later in the same interview, Mr. Corbett recalled that Tom was one of six pupils whom he did not approach at all during the lesson. The fact of Mr. Corbett not interacting individually and directly with Tom throughout the whole of one day was noted by classroom observer (Shadow Study Notes F).

The lack of frequent interaction between Mr. Corbett and Tom -- especially the fact of Mr. Corbett not initiating such contacts -- is curious in light of Mr. Corbett's selection of Tom as a student about whom he was concerned. According to Mr. Corbett, Tom was a pupil he "would like to be able to work with for another year" (Teacher Interview F, Part 2). Later in the same interview, Mr. Corbett explained:

> I would really like to have Tom for another year just to see if we could get him to come out of his shell. I know he's fairly quiet and I know that people are ... withdrawn isn't the word, but a little introverted ... and in Tom's case that is somewhat so. But he really does lack confidence in expressing himself. I think, in the right circumstances which I can provide - and I think I do provide - that he could improve in that area: He could come out of his shell more. I think he should before he goes to junior high.

Whether or not Mr. Corbett did provide the kind of circumstances which would assist Tom's academic and social growth is not clear. Mr. Corbett, although apparently concerned for Tom, admitted his own uncertainty in trying to understand him. During an interview wherein he was asked to rate his pupils in accordance with his judgement as to their usual attitude to classroom activities, Mr. Corbett commented:

> Tom is a difficult one. In my opinion Tom is interested, but it's really difficult to tell. You might say because he doesn't get involved in classroom activities, especially the oral kind of work, that he is uninterested or passive. But in other ways, he demonstrates that he is interested (Teacher Interview F, Part 2).

A close examination of the interview conducted with Tom at the end of the Shadow Study day adds little extra information. Tom was uncommunicative during the interview, although he was not impolite nor did he seem to be intimidated by the interviewer or the occasion. He did, in fact, express a willingness to return for a further interview. When asked "What kinds of things are you best at in your class?" Tom first mentioned only sports and reading. He liked playing games, exercising, and doing gymnastics in physical education, but was non-committal concerning all other subjects. When discussing his attitudes towards his class, Tom indicated that he liked the room itself, and the guinea pigs and goldfish in the room. He was questioned further:

Interviewer: If somebody told you that you never had to come back to schook, would you come back?

Tom: Yes.

Interviewer: Why?

Tom: I want to finish school.

Interviewer: If you were told you could have credit and take a couple of years off, would you still come back?

Tom: If I didn't go to junior high (school) I wouldn't know anything about high school. I couldn't do the hard work.

Interviewer: Do you like school?

Tom: Yes.

Interviewer: What are the things you enjoy best at school?

Tom: Learning things.

Interviewer: What things in particular would you like to learn about?

Tom: Grammar. (Long pause)

Interviewer: Games? Sports? Math?

Tom: Yes.

Interviewer: Music?

Tom: No.

Interviewer: What do you dislike about school? Are there any things that you can't stand?

Tom: No.

(Pupil Interview F)

Still later in the interview, Tom clained that there was nothing in school that made him angry, mad, or annoyed, or that bothered him. Music, he said was the only thing that bored him. Although he agreed that "some things" in school frustrated him, he said he could not think of any. Finally, he replied, "I don't know" when asked what things made him excited about school.

It is helpful at this point to refer to certain of the factors contained in the attitude questionnaires administered to Tom and his classmates. The attitudes of Tom and his classmates toward selected aspects of self-esteem and perceived difficulty of school work are presented in Table 87. From Table 87, it is seen that Tom's score on the MCI difficulty of school work factor was more than one standard deviation below the class mean score. A low score for this factor indicates that the pupil does not perceive school work to be very difficult. Tom was one of eight children scoring lowest on this factor. According to the individual items in this factor, Tom did not find school work "hard to do," and most children in his class could do their school work without help.

| Instrument | Factor | | | Complete instrument | |
|---|---|---|---|---|---|
| | Title | Tom's score (max) | Class mean (SD) | Tom's score (max) | Class mean (SD) |
| MCI | difficulty | 11 (27) | 14.60 (3.30) | 93 (135) | 91.96 (6.89) |
| SEI | general self-esteem | 48 (52) | 36.64 (7.10) | 90 (100) | 70.16 (14.59) |
| PCAS | academic self-image | 13 (18) | 11.24 (3.43) | 61 (84) | 47.84 (9.20) |

Table 87. Attitudes of Tom and his classmates toward selected factors of self-esteem and perceived difficulty of schoolwork.

As well as perceiving school work to be easy, according to the SEI general self-esteem factor, Tom had the highest general self-esteem in his class (see Table 87). Tom's responses to the individual items in this factor indicated that he believed he did not spend much time daydreaming, that he did not give in very easily, that he was not a failure, and that things usually did not bother him.

Finally, Tom was one of five pupils whose scores ranked eighth on the PCAS academic self-image factor (see Table 87). Tom's responses to several of the individual items on this factor show some evidence of self-doubt concerning his academic abilities, especially in some areas. For example, for the statement "I think I'm pretty good at school work," Tom answered "not sure," and for "I get a lot of arithmetic questions wrong," Tom answered "sometimes." Whereas on some items Tom expressed what appeared to be realistic and honest hesitancy, for other more extreme statements his responses were emphatically confident. For example, Tom gave "never" in response to the statement "I'm useless at school work," and answered "no" to the statement "I don't seem to be able to do anything really well in school." The apparent lowered self-esteem indicated by the PCAS items is probably a function of the nature of the questions and the range of optional responses which allows for a more accurate measure of the respondent's attitudes than is possible through either of the other instruments referred to in Table 87.

From the evidence presented in this section, it appears that Tom may best be classified as a generally indifferent student who was not achieving on a day-to-day basis what he showed himself to be capable of achieving on some standardized tests (particularly in language arts).

Both Mr. Corbett and Tom's interviewer commented on Tom's hesitancy in discussion situations, and Mr. Corbett further referred to Tom's difficulty in reading -- yet Tom mentioned reading and grammar as the only two areas of academic study that he enjoyed. Tom's potential for achieving at a comparatively high level in language arts (as indicated by his CLT and MAT scores) was obviously not realized during his classwork or classroom activities and the next section of this chapter will examine Tom's classroom coping behaviours in order to throw further light on the matter.

### Classroom coping behaviour

CASES observations for Mr. Corbett's class were conducted only in those lessons taught by him (i.e., language arts). According to data collected during those observations and summarized in Table 88, Mr. Corbett's class was predominantly "attentive, adult-oriented, and compliant" (Style E), and "conforming, passive, and submissive to directions" (Style H) in TD settings. In NTD settings, Mr. Corbett's pupils were generally "appropriately task-oriented, independent, and self-motivated" (Style G).

Also in TD settings, three pupils were visibly "resistant, passive aggressive, delaying, and peer oriented" (Style B), and seven pupils were "passive, withdrawn, avoidant, and dreamy" (Style C). In NTD settings, six pupils visibly exhibited Style B behaviours, two visibly exhibited Style C behaviours, and three were visibly "peer-dependent, distractible, and off-task" (Style D). Also in NTD settings, however, some pupils exhibited other, more positive behaviours: seven children were visibly "assertive, socially integrative, and task-oriented"

| CASES coping styles | Settings | | | |
|---|---|---|---|---|
| | TD | | NTD | |
| | score | vis % | score | vis % |
| A (aggressive, manipulative) | 0 | 0.0 | 0 | 0.0 |
| class $\overline{X}$ | | 0.04 | | 0.02 |
| S.D. | | 0.10 | | 0.11 |
| B (resistant, peer-oriented) | 13 | 0.27 | 2 | 0.14 |
| class $\overline{X}$ | | 0.68 | | 0.48 |
| S.D. | | 0.29 | | 0.53 |
| C (passive, dreamy) | 5 | 0.53 | 0 | 0.0 |
| class $\overline{X}$ | | 0.72 | | 0.24 |
| S.D. | | 0.47 | | 0.46 |
| D (distractible, peer-dependent) | 13 | 0.34 | 9 | 0.80 |
| class $\overline{X}$ | | 0.31 | | 0.50 |
| S.D. | | 0.13 | | 0.48 |
| E (attentive, adult-oriented) | 44 | 1.16 | 1 | 0.09 |
| class $\overline{X}$ | | 1.56 | | 0.18 |
| S.D. | | 0.38 | | 0.27 |
| F (assertive, task-oriented) | 0 | 0.0 | 0 | 0.0 |
| class $\overline{X}$ | | 0.01 | | 0.67 |
| S.D. | | 0.01 | | 0.83 |
| G (independent, on-task) | 2 | 0.03 | 41 | 2.00 |
| class $\overline{X}$ | | 0.29 | | 1.45 |
| S.D. | | 0.04 | | 0.61 |
| H (conforming, passive) | 113 | 1.98 | 3 | 0.18 |
| class $\overline{X}$ | | 1.36 | | 0.17 |
| S.D. | | 0.30 | | 0.32 |
| Overall CASES Coefficient | | 5.04 | | 6.68 |
| class $\overline{X}$ | | 4.99 | | 6.48 |
| S.D. | | 0.37 | | 1.73 |

Note: underlining indicates behaviour is visible ( > 1.00)

Table 88. Behaviour styles of Tom and his classmates according to settings in language arts (CASES F).

but also considerably more "conforming, passive and submissive to directions" (Style H). In NTD settings, Tom's behaviour was recorded as being visibly and considerably more "appropriately task-oriented, independent, and self-motivated" (Style G) than his classmates.

The descriptions of Tom's behaviours as encapsulated in the CASES sytles are incomplete, however. A closer examination of other data is necessary to help account for Mr. Corbett's expressed concern for Tom, and his description of Tom as "really quiet" (Teacher Interview F, Part 1), and "usually quiet -- doesn't ask questions" (Teacher Sort Task Interview F, 3). Also, there is a need to attempt to account for the contradiction between Mr. Corbett's apparent view of Tom as a quiet but reasonably conscientious and interested student, and the observer's summary statement at the end of Shadow Study day:

> Throughout the day I don't think he (Tom) was productively engaged in work for more than ten percent of the time -- a real daydreamer, fiddled with his pen or pencil, gazed around the room, etc. He wasn't called upon once by any teacher to answer a question or give a comment. The only time he volunteered to answer a question was during music class -- he raised his hand once, but was not called on (Shadow Study Summary F).

Initially, it is helpful to group the CASES data into broad classifications which typify Tom's behaviour as "desirable", "in appropriate," or "unacceptable" (Table 89). From Table 89, it is seen that Tom's behaviour in TD settings was desirable for 83.68 percent of the time, and inappropriate for 16.32 percent of the time -- in both cases these behaviours were visible. In NTD settings, Tom's desirable behaviours were still visible -- but diminished, whereas his inappropriate behaviours were more visible. In neither setting did Tom display any measurable unacceptable behaviours.

| Behaviour classification | Settings | | | | | |
|---|---|---|---|---|---|---|
| | TD | | NTD | | both | |
| | score | vis % | score | vis % | score | vis % |
| desirable[a] | 159 | 83.68 | 45 | 80.36 | 204 | 82.93 |
| inappropriate[b] | 31 | 16.32 | 11 | 19.64 | 42 | 17.07 |
| unacceptable[c] | | | 0 | | | |

[a] visible at 80%

[b] visible at 10-15%

[c] visible at 3%

Table 89. Classification of Tom's behaviour in language arts according to setting (CASES F).

(Style F), and one pupil was "conforming, passive, and submissive to directions" (Style H).

The CASES data are generally supported by the classroom and Shadow Study observers. Although these observers agreed that much of the pupil behaviours were attentive, compliant, task-oriented, and conforming (Styles E, G, and H), they also noted a significant amount of less desirable incidents. For example:

> Kelly and Val waste much of their time, as do Danny and Bob. It seems to me that Bob is encouraging Danny to misbehave. It is not just this four -- it seems that many of the students are just socializing this morning. (Anecdotal Notes F, 1).
>
> There are a number of mild behavioural warnings in the class. He (Mr. Corbett) doesn't seem to like the idea that they are through (seatwork assignments) and roaming around (Anecdotal Notes F, 1).
>
> One of the biggest problems is too many kids talking at once. (Mr. Corbett) had to bring this up several times -- last time: "Hold it! There's a time to move and a time not to move -- and this isn't the time to move. You're being discourteous to myself and to Sharon (who was speaking to Mr. Corbett)" (Anecdotal Notes F, 2).
>
> The kids seemed tired and/or bored today -- yawning, daydreaming, etc. Mr. Corbett wasn't as dynamic as usual (Anecdotal Notes F, 2).
>
> Kids worked pretty well (but) not much enthusiasm -- they seem to sense the last days of school atmosphere (Shadow Study Summary F).

Tom's classroom behaviour as recorded by CASES observations, was generally positive, in keeping with the majority of his classmates. From Table 88, it is seen that Tom's Overall CASES Coefficients in both TD and NTD settings were extremely close to the class mean scores. In TD settings, however, although visibly exhibiting Style E behaviours, he was considerably less attentive and adult-oriented than his classmates, The Shadow Study was undertaken to provide more detailed information concerning Tom's school behaviours, but it must be emphasized that the period of observation for this special study lasted for only one day. In the course of the Shadow Study day, while attending classes in his homeroom, Tom spent all of his time in his own seat (see Figure 33, p. 467). The only times he left his seat were to attend recesses, and music and physical education lessons. Also, at no time during five periods of language arts and one period of social studies in his homeroom was Tom observed to speak to or otherwise interact with anyone. Tom interacted verbally only with other children, and two of these occasions occurred briefly in school (in music lesson, and in the hallway while waiting to enter a room), and the other occasions were similarly brief and occurred during recess with his playmates. Tom's behaviours during the course of the Shadow Study day are perhaps best conveyed through the observer's specimen descriptions:

> 9:25 a.m. (Language arts in Room 1 following physical education lesson). Tom seated in desk picking his fingers, staring at them, then puts his right elbow on the desk, head resting in his hand, looking at the guinea pigs Then glancing around, chews thumbnail, distracted by disturbance from the adjacent class. Not really appearing interested -- spaced out.
>
> 9:35 a.m. Tom yawning, both elbows on desk, hands together fiddling with hands. Watches casually as teacher asks questions of class. Then puts foot up on seat, pinches his hand, rubs his nose. Sitting straight, leaning slightly forward. Rubs desk-top with his thumb. Does not appear interested in what is going on -- non-participative, quiet student.
>
> 9:45 a.m. Tom sitting at deks, scribbler open, playing with his ballpoint pen -- took the spring out. Inserted pencil into the open end of the pen. Then glanced around at Danny, who is writing, then back to playing with the spring in the pen. Has not written a word, does not appear to be thinking about it either. Glanced at Adele, who was making her way back to the seat in front of him.

> 10:15 a.m. (Language arts in Room 1 following recess). Tom at desk, sitting straight up, rubs left hand through hair, glancing around the room, right elbow on desk and pencil near mouth. Puts pencil to paper, then stops to glance at Cathy bringing water to the guinea pigs. Tom has about four lines written (on the assigned work). Spends most of the time daydreaming, glancing around the room, not interacting with anyone. (Shadow Study Notes F).

Specimen descriptions similar to those recorded above were made throughout the remainder of the morning. But with the second lesson of the afternoon, the subject and Tom's behaviour changed:

> 1:15 p.m. (In music room). Tom sitting and discussing his (music) exam. paper with Peter, watches music teacher who has gone to the chalkboard, ... then looks at paper.
>
> 1:25 p.m. Tom sitting next to Peter, taps him on the leg to get his attention (wanted to get him to look at an answer on his test). Talks to Peter about his test. Shakes his knees together for a few seconds, glances up at the teacher who is taling about the test .... Tom seems interested in the test.
>
> 1:35 p.m. Tom sitting with his recorder to his mouth, waiting to begin playing the song -- waiting for the reacher to cue in on the piano.

Tom's behaviour continued to be generally appropriate and on-task throughout the remainder of the music lesson. Upon returning to his homeroom for language arts following recess, however, Tom's behaviour reverted to the pattern noted earlier in the morning. These often inappropriate and off-task behaviours continued until the last period of the day, which was taught by the social studies specialist:

> 2:45 p.m. (Social studies in Room 1). Tom sitting quietly at his desk, head resting on left hand, looking over at the teacher. He is motionless, paying close attention.
>
> 2:55 p.m. Tom sitting sideways in his desk, hands clasped around his right knee, carefully watching and listening to the stories being told (by classmates). Then he appears to lose interest, glances around, rubs his head with his hands, and daydreams a bit.

From the specimen descriptions reproduced above, it is obvious that each of the two major behaviour classifications displayed by Tom in the course of the Shadow Study day was related to a different setting. Most of Tom's inappropriate and off-task behaviours occurred during Mr. Corbett's language arts lessons, whereas most of his desirable and on-task behaviours occurred during physical education, music, and social studies lessons. Table 90 was constructed to consider the possibility that the behaviours displayed by Tom during the Shadow Study day were typical of his regular classroom behaviours -- but such does not appear to be the case.

| Behaviour classification | Threshold visibility % | CASES data % | Shadow Study % |
|---|---|---|---|
| desirable | 80 | 82.93 | 57.78 |
| inappropriate | 10 - 15 | 17.07 | 42.22 |
| unacceptable | 3 | | |

Table 90. Classification of Tom's behaviour according to actual CASES data, and a CASES analysis of the Shadow Study specimen record data.

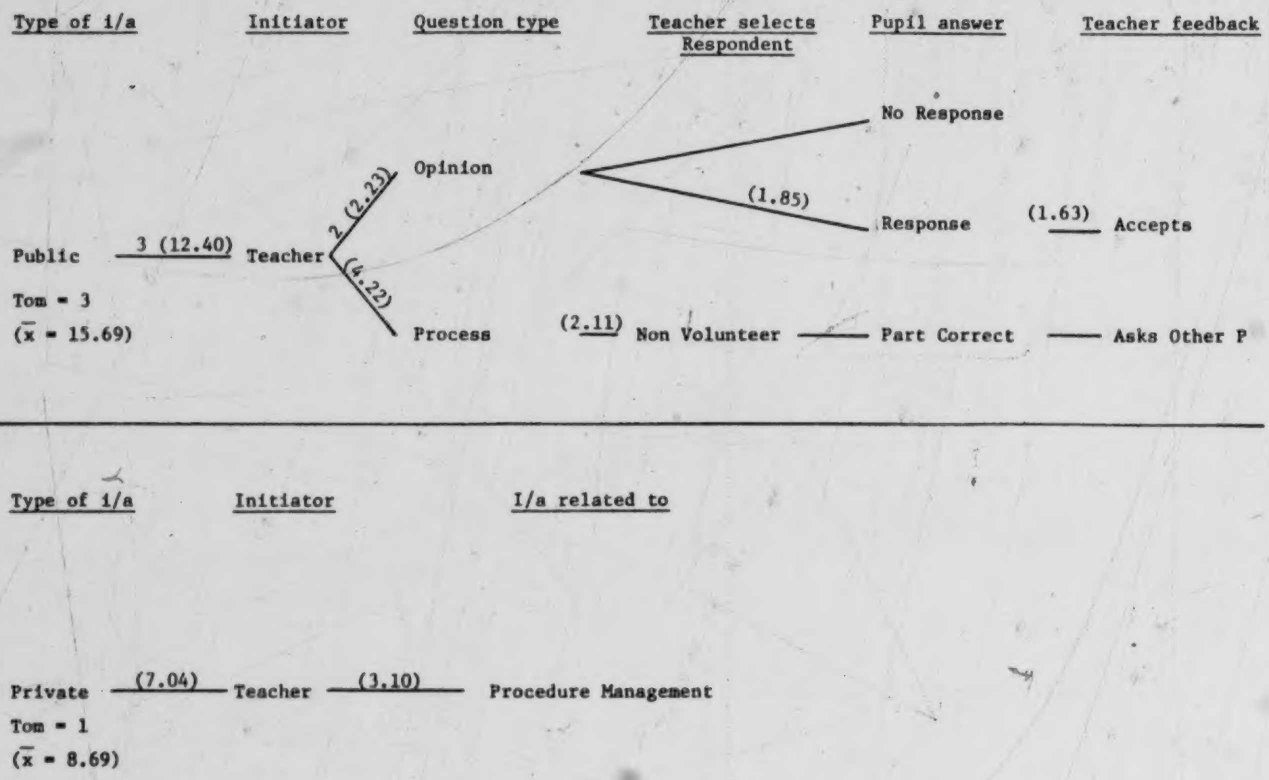
From Table 90, it is seen that the CASES data, gathered over a four-week period in May, 1976 indicate that Tom's behaviours were visibly desirable nearly 83 percent of the time, and visibly inappropriate only 17 percent of the time. A CASES analysis of the Shadow Study specimen reports, however indicates that Tom's behaviours were desirable almost 58 percent of the time, but did not reach visibility (80 percent), whereas his inappropriate behaviours were most visible and accounted for over 42 percent of the time. Clearly, Tom's behaviours as observed during the Shadow Study conducted on June 21, 1976 cannot be extrapolated to his general school behaviours.

Even discounting physical education because of its totally different setting, activities, and characteristics when compared with lessons typically taught in classrooms, the data presented in this section point to a wide discrepancy between Tom's coping behaviours in language arts lessons and the behaviours he exhibited in other subjects -- even in music, a subject for which he expressed a dislike. The most apparent and seemingly significant difference between the language arts and other lessons on the Shadow Study day was in the nature of the classroom activities and assignments, and the teaching strategies of the teachers. In much of Mr. Corbett's language arts lessons the pupils had been required to listen to recorded music, then to compose poems, some of which were later read aloud by their authors or Mr. Corbett. Thus, for much of the Shadow Study day in language arts lessons, Tom was largely responsible for his own productivity in NTD settings.

In both music and social studies, however, the teachers assumed more dominant roles, were more teacher-centred in their behaviours, and used more command-style teaching strategies.. Reference to the specimen descriptions of Tom's behaviours during the various lessons clearly show he was less on-task in the laissez-faire and NTD settings of language arts and more on-task in the more directed and structural TD settings of music and social studies.

Earlier in this chapter it was pointed out that the classroom strategies and teaching techniques displayed by Mr. Corbett in the course of this investigation were possibly not typical of him, and as the school year drew to a close, so Mr. Corbett's lessons were less dynamic and showed less evidence of pre-planning. Tom obviously did not cope well in such situations, and although his classroom behaviours were generally more positive than those observed during the Shadow Study day, it seems probable that Tom really spent much of his time responding to "internal stimuli" and "observing passively" (Spaulding, 1966), when a more casual observer might assume his behaviours to be more functionally positive. It certainly seems clear that Tom's measured attributes and abilities in verbal skills were not adequately challenged or fostered in Mr. Corbett's lessons.

That Tom seldom interacted verbally with Mr. Corbett in classroom discussions in overwhelmingly supported by the DICOS data recorded in 11 language arts lessons. From Figure 35 it is seen that in 11 lessons, Tom interacted with Mr. Corbett on only four occasions, compared with a class mean of 24.38. All of Tom's dyadic interactions were teacher-initiated, whereas 20 percent of the dyadic interactions for the whole class ~~were~~ student-initiated. None of Tom's responses to Mr. Corbett was volunteered, and the interactions related to opinion, process, and procedure management. (None was work- or behaviour-related.) The information provided by the DICOS data (i.e., the extremely low number of dyadic interactions between Mr. Corbett and Tom), is surprising in view of Mr. Corbett identifying Tom as a pupil for whom he felt considerable concern (Teacher Interview F, Part 2).


Type of i/a
Initiator
Question type
Teacher selects Respondent
Pupil answer
Teacher feedback
Public
3 (12.40)
Teacher
2 (2.23)
Opinion
(4.22)
Process
No Response
(1.85)
Response
(1.63)
Accepts
(2.11)
Non Volunteer
Part Correct
Asks Other P
Tom = 3
($\bar{x}$ = 15.69)
Type of i/a
Initiator
I/a related to
Private
(7.04)
Teacher
(3.10)
Procedure Management
Tom = 1
($\bar{x}$ = 8.69)

Note: links with no figure showing represent N = 1. Class mean < 1.00 not shown.

Figure 35. Nature of the public (class N = 408) and private (class N = 226) interactions between Tom and Mr. Corbett in 11 language arts lessons (DICOS F).

In summary, the description of Tom as "a quiet student" seems apt. He was quiet (although not unsociable) in the sense that he spoke little and to few people. In the classroom he was also "quiet" in the sense of being relatively inactive, both in terms of moving about the room and in working assiduously on assignments. He was, furthermore, a cooperative and courteous pupil who did not engage in disruptive behaviours and who made few demands on his teachers. Mr. Corbett's acknowledgement following certain lessons that he was not "really aware" of Tom is perhaps an appropriate testimony of Tom's classroom behaviours.

## Discussion

The discussion presented here will focus on salient points contained in the previous sections and which seem to have special significance for Tom's life as a school pupil. Where appropriate, cause and effect relationships among the factors brought into discussion will be suggested. Finally, evaluative comments will be made concerning the formal education experienced by Tom.

Most of the process and interactive data upon which this study is based were obtained in language arts lessons taught by Mr. Corbett, Tom's homeroom teacher. It is important to recognise, therefore, that much of Tom's school experience was affected by teachers for whom and in situations for which there is little data upon which to base descriptions or make judgements. It is also important to recognise that Mr. Corbett's preparation for teaching and his interactive behaviours may have been altered in significant ways by factors external to this study.

Tom was a "pleasant, courteous" student who had a few friends with whom he played at recess and out of school, but who was not very socially active and who interacted very little with anyone at all during lessons. He appeared to have a happy home life which included a twin brother with whom he played quite amicably, and supportive parents who valued education and were concerned for Tom's welfare.

Tom appeared to have very positive attitudes toward Mr. Corbett, his class, and schoolwork (Table 76), although his attitudes toward school in general were less positive (Table 78). In particular, he seemed satisfied with his academic progress in school and claimed that he "liked to learn things," especially grammar. His only admitted dislike was music (Pupil Interview F). Beyond providing for his immediate enjoyment, Tom valued being at Napier School for the preparation it provided for later success at junior and senior high schools.

Tom was more conscious than his classmates of friction and competitiveness in Room 6 (Table 79). He, on the other hand, felt much less anxious in the classroom situation and was not very convinced of the importance of doing well at school (Table 78).

These latter attitudes appear to have been reflected in Tom's classroom coping behaviours -- certainly insofar as they apply to language arts lessons. In language arts lessons Tom's behaviour was typically visibly desirable, particularly in TD settings; but a considerable amount of his behaviour was also inappropriate, especially in NTD settings (Tables 88 and 89). During one day, when Tom's behaviours were the sole focus of attention for the investigators, he was recorded as spending more than 40% of his classroom time (for all subjects combined) off-task (Table 90). This represents considerably more off-task behaviour than his daily average measured over a three week period using the CASES observation system in language arts only. It is probable that the data collected during the Shadow Study day were atypical of Tom's classroom behaviours. It is possible, however, that the CASES coding system was not sufficiently penetrating to detect the details of Tom's behaviours which were noted and recorded during the Shadow Study specimen descriptions. It is suggested, therefore, that Tom's behaviours, although often overtly desirable, were also frequently lacking in concentrated focus on lesson topics. Although he enjoyed his lessons, he was not sufficiently anxious in the classroom situation, nor was he sufficiently highly motivated, to stay on-task in order to achieve at a high level.

Tom's academic attributes were apparently equal to a moderately high level of academic achievement, at least on a class comparative basis. His verbal, nonverbal, and total DIQs on the CLT, recorded in June, 1976 were 115, 100, and 107.5 respectively. These results ranked Tom as equal second, equal twentieth, and tenth respectively in his class of 28 pupils (Table 81). Furthermore he had shown improvement in his academic achievements in language arts from September, 1975 to June 1976. In the areas of word knowledge, reading, language, and spelling on the MAT Tom recorded an average increase in his grade equivalents of 1.78, compared to a class mean increase of .68 (Tables 82 and 83). Tom's class rank for total reading on the MAT improved from equal sixth in September, 1975, to third in June, 1976. Thus, in spite of the extremely negative evidence of the Shadow Study day, and the less negative evidence of the general CASES data, Tom's apparently off-task and inappropriate behaviours, and his lack of motivation, did not prevent him from gaining both absolute and relative improvement in academic achievement as recorded by standardised tests.

In view of the evidence of positive academic achievement presented above, it is surprising to find that several of Tom's teachers reported a lack of satisfactory improvement in his "effort" and "achievement" in the subjects they taught (Table 86). More specifically, Mr. Corbett rated Tom lower than most of his classmates on these two measures. It is also interesting to note that Mr. Corbett rated Tom lower than most of his classmates for "group participation", "individual participation," and "working skills" (Table 86).

In spite of these ratings, Mr. Corbett apparently considered Tom to be "interested" in the classroom teaching/learning situation and "average" (together with 11 classmates) in his academic ability. According to Mr. Corbett's criteria, however, Tom was one of seven pupils who achieved "below" the level expected of him in language arts (Table 85). This low opinion of Tom's academic ability was confirmed by Mr. Corbett when he projected that Tom would rank twentieth of 26 in the class in language arts, and twenty-third in his overall achievements.

Mr. Corbett's assessment of Tom's achievements in language arts are, of course, completely at odds with Tom's MAT and CLT results. The discrepancy may be simply explained by noting that Mr. Corbett's criteria for achievement almost certainly differed from those of the standardised tests, but the extreme discrepancy in the two assessments (Tom ranked third in total reading and ninth in language on the MAT, June, 1976; and twentieth in Mr. Corbett's language arts class, May, 1976) seems to indicate that other important factors were involved.

In describing his classroom methods and policies, Mr. Corbett expressed a preference for using whole class and small group discussions. Tom was not a gregarious, communicative person and did not function well in such situations. Thus, he did not favourably impress Mr. Corbett with his verbal skills and knowledge and, without this evidence, Mr. Corbett formed a low opinion of Tom's abilities. Also, the fact that Tom did not play an active part in classroom discussions may have been an inducement for him to indulge in off-task behaviours, especially in daydreaming and responding to internal stimuli.

Mr. Corbett may have sought to promote Tom's involvement in class discussions through initiating classroom interactions with him. He recognised Tom's introverted and uncommunicative behaviours and expressed a desire to work with Tom for another year in order to help "get him to come out of the shell" -- in fact, Tom was a student for whom Mr. Corbett had particular concern (Teacher Interview F, Part 2). Nevertheless, the number of classroom dyadic interactions between Tom and Mr. Corbett was extremely low, an average of .36 per lesson for 11 language arts lessons, compared with a class mean of 2.22 per lesson (i.e., Tom's classmates averaged six times the number of contacts experienced by Tom). In this respect, it is interesting to note that all four of Tom's dyadic interactions, only one of which was private, were initiated by Mr. Corbett (Figure 35).

According to Silberman (1969), students for whom teachers express concern are subjects of much more teacher contact and acquiescent replies than are other students. Furthermore, "concern" students are "the source of greatest classroom attraction to teachers," and the teacher's attitude of concern is "exhibited in public and in private, even when doing so (conflicts)...with meeting responsibilities toward other students and enforcing classroom rules" (Silberman, 1969:405). Such was not the case for Tom, however, for the four-week period of close classroom observation which formed part of this investigation.

In summary, it seems that Tom experienced academic success (as measured by some criteria at least) at school because of his academic attributes, and incidentally to the goals and classroom methods of his teacher, rather than because of specific and deliberate teacher behaviours. Tom was a reasonably happy and not particularly anxious pupil because his social needs were satisfied by a few, staunch and compatible friends, and because he did not aspire to high academic achievement. Quite possibly, had Mr. Corbett sought to bring Tom more fully into the social mainstream and lesson discussions of Room 1, Tom's complacency and satisfaction with his classroom experiences would have been greatly reduced and he would have been a less happy child. On the other hand, had more stimulating and motivating teaching/learning methods been employed in Room 1, perhaps Tom would have been drawn "out of his shell" in a more natural and acceptable manner with positive results for his development both academic and social. There is no doubt that Mr. Corbett provided for a warm social climate in Room 1, but he lacked accurate empathy, certainly in his relations with Tom.

## Summary

Chapter IV introduced the community of Westham, a small town in a rural setting in the province of Alberta, and the location for this study. Following this introduction, Jamieson Elementary School, the site of three of the classes from which case study pupils were selected, was described. The three case studies were then presented as follows: first -- grade one, second -- grade three and, third -- grade six. The same procedure was repeated for the three case studies conducted at Napier Elementary School.

Each case study began with a description of the classroom environment. Next, the homeroom teacher, her personality, instructional goals, curriculum content, and teaching behaviours were presented and discussed. The case study pupil was then introduced and placed in the context of the classroom setting. Each case study was presented through sections dealing with the influence of the pupil's home and parents, and the child's attitudes toward school; the social setting of the classroom; the academic attributes, abilities, and achievements of the pupil; and the classroom coping behaviours and teacher-child dyadic interactions of the case study student. Each case study was concluded with a presentation and explication of the factors which appeared to be salient in the school life of the subject pupil.

Chapter V presents conclusions which have been drawn as a result of an examination of all six case studies. Apparently significant issues and/or items common to some or all of the six cases are dealt with.

# Chapter V

# SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

## Summary

This study was one of six doctoral dissertations which were made possible through a combined investigation. In addition to this study, the larger investigation comprised five other studies which focused on:

1. The relationships between teacher behaviours and pupil behaviours, achievement and attitudes (Eggert, 1977).

2. The relationship between pupil characteristics and teacher-pupil dyadic interaction (Fasano, 1977).

3. The relationships of students' classroom behaviours with achievement and attitudes. Also considered were the effects of students' sex, I.Q., and socioeconomic status with respect to these relationships (Mahen, 1977).

4. The interactive thought processes of teachers using an introspective technique, stimulated recall from videotape (Marland, 1977).

5. The relationships between teacher expectations and teacher-pupil interaction, and the relationships between teacher characteristics and teacher susceptibility to expectation effects (Muttart, 1977).

The primary purpose of this study was to examine and describe the school experience from the unique and individual perspectives of six pupils. A micro-ethnographic, case-study approach was used in order both to link with and to unite the five companion studies.

## Methodology

The larger investigation comprised a sample of 159 pupils from grades one, three, and six of two elementary schools located in a small, urban community. The six pupils featured in this study were randomly selected, one from each of the six classes in the large sample.

Three types of data were collected and used in this study: contextual, operator, and transducer. The contextual data included descriptive information concerning the community, the two schools, the six homeroom classrooms, the six homeroom teachers, and the classmates of the six case study pupils. The data obtained from teachers included personal demographic details; classroom goals, curriculum content, and teaching methods; perceptions of and attitudes toward pupils; video-tape stimulated recall of lessons; and assessments of attitudes, personality, and beliefs ~~as~~ measured by the Sixteen Personality Factor Questionnaire, the This I Believe Test, and the Minnesota Teacher Attitude Inventory. Also, eight high inference rating scales were used in classroom observation to obtain measures of teachers' management, instructional, and interpersonal skills.

The pupil operator data outlined below were collected on all 159 students in the larger investigation and were used to provide a contextual backdrop for each of the case study children. The operator data collected on the pupils included measures of classroom sociometric status; parents' attitudes toward education; parents' perceptions of and expectations for their children: pupil intelligence and "readiness"; pupil academic achievement; and pupil attitudes toward school, the class, instruction, the teacher, and various aspects of self-esteem (general, social, and academic). Interviews were conducted with the six case study pupils only.

The pupil interview was conducted in conjunction with the Shadow Study, an observational method included below.

Transducer data were collected by the six investigators using various methods and systems of classroom observation and reporting. Daily Anecdotal Notes were made by each investigator for a six-week period from the date of entry into the schools in early May onwards. Each investigator reported on one class in each of the two schools.

Working as trained teams and following a week of classroom familiarization, the investigators spent a three-week period collecting data on the classroom coping behaviours of all 159 children in the large sample. The instrument chosen for this purpose was the Coping Analysis Schedule for Educational Settings (CASES), a low-inference observation system. As far as possible, data were collected during language arts and mathematics lessons. While one team of investigators collected CASES data, another team recorded the nature and quantity of the interactions between teachers and pupils using the Expanded Brophy-Good Teacher-Pupil Dyadic Interaction Classroom Observation System (DICOS).

Finally, through random selection, a pupil was chosen from each of the six classes. These six pupils then became the foci for the cases reported on in this study. Following selection, the six pupils were observed intensively for one complete school day by trained investigators using the Shadow Study technique. The technique employed in this study involved the recording of narrative accounts of behaviour settings, the mapping of teacher and pupil movements, and specimen descriptions of the behaviour of the case study pupil. These recordings were made every tenth minute on a staggered basis.

Immediately following the Shadow Study, the case study pupils became the subjects for semi-structured, audio tape-recorded interviews with the observer. At the end of the interviews, the observers wrote interpretive, personal accounts of the Shadow Study experience.

Beginning in early May, the six investigators spent one week becoming familiar with the two schools and the six classrooms. They, in turn, became familiar and accepted visitors, thus reducing reactive effects. The next three weeks were used for the collection of classroom interactive and introspective data. Paper-and-pencil testing of students and the Shadow Studies were conducted during the first two weeks of June. Cumulative Record Card and pupil report card data were collected in the third week of June.

## Data Analysis

The data were analysed using a variety of techniques, and presented in a variety of formats. In general, contextual data concerning physical environments were subjected to full verbal descriptions accompanied by tables and figures where these appeared to clarify and aid understanding. Total class scores for all pupil operator data were grouped in order to arrive at class means and standard deviations. These data served as contextual information for the case study pupils. Teachers' instructional goal statements, curriculum content, and methods were described and explicated in terms of their interrelationships. A one-day sampling of teacher and pupil movements in each classroom was analysed to determine locations and postures and was presented both verbally and graphically. Transcripts of teacher interviews and the written responses to the various measures applied to teachers were examined minutely for information relevant to their attitudes and perceptions as these related to their roles as teachers and to the students -- in particular, the case study pupil.

In general, all operator data collected for the case study pupils were first scored according to the requirements of each instrument and treated as contributing to class total scores. The case study pupil written responses to these instruments were then examined according to the separate factors of each instrument, and according to selected individual items. The data were presented in order to allow comparisons between case study pupil responses and class mean scores.

In the case of the general classroom observation systems (CASES and DICOS), the case study pupil data were drawn from the recorded data in order to present the case study pupil as an individual, again in the context of the class. These data were reported verbally, and in tables and figures where the latter seemed appropriate.

The Shadow Study data were examined for classroom coping behaviours, social contacts, pupil and teacher movements, and general classroom events, particularly as all of these applied to the case study pupil. Coping behaviours, social contacts, and pupil and teacher movements were all tabulated numerically for presentation in tables and figures as well as verbal discussion. The Shadow Study interviews were examined for evidence of case study pupil perceptions, attitudes, social relationships, and act meaning.

Throughout this study, the data from all sources were examined for validity and reliability through the process of "triangulation," that is, the data recorded on a topic by one method were checked against data recorded on the same topic by another method. The data were interpreted employing "structural corroboration" (Eisner, 1975) as a means of testing the validity both of the data and the interpretations and speculations placed on them in this study.

## Conclusions

Descriptive case studies and micro-ethnographies do not permit the drawing of wide-ranging conclusions. They do, however, give a special insight into reality as it exists at least for the individuals whose cases have been studied. The conclusions presented here arise directly from the experiences gained from, and the procedures developed for this study, and from the six cases presented in Chapter IV. Although it may be justifiably claimed that the larger Westham study involved a biased sample of community, teachers, and children, it is claimed here that within that sample the six case study children were randomly selected. Furthermore, they were selected following the collection of almost all data on all students, thus lessening the possibility of biased observation and data collection.

### General Conclusions

The following general conclusions seem warranted following the completion of this, the last of the six dissertations to be derived from the large-scale Westham investigation.

1. Research Design. The Dunkin and Biddle (1974) model (see p. 6) proved a most useful device for coalescing six separate studies to produce one comparatively large-scale investigation. The model, as presented by Dunkin and Biddle, would provide greater insight into pupil classroom behaviours if more stress were given to pupil formative experiences (including factors connected with the home, and with children's extra-school social interactions) and, especially, to such pupil characteristics as

independence, determination, and strength of character.

2. Methodology. The fact of six investigators, each pursuing an independent line of inquiry, focusing on and sharing a common data base, proved most satisfactory yet parsimonious as a means of generating, collecting, and treating data.

3. Interrelations among Investigators. In spite of warnings from colleagues, the high degree of colloboration required among members of the investigative team presented very few problems. Group research projects at the doctoral level, as typified by the large-scale investigation of which this study was a part, present a desirable and practical means of answering Clifford's (1973) plea for educational investigation based on continuity and unity of efforts.

4. Examination and Treatment of the Data. A search of the literature failed to produce standardized, a priori techniques for examining and treating all the data collected for this study. Although certain commonplace techniques were adopted (e.g., the use of sociograms), other techniques (e.g., the mapping of classroom locations, and tables summarizing the Shadow Study data) were devised specifically by the author for this study.

Several attempts were made to compress the data and to render it more manageable during the examination stage. While actually writing the case study reports, however, this author found it necessary to become completely immersed in the data collected for each case, and to keep the data continually before him in order to perceive and cross-reference items of significance within the data.

## Specific Conclusions

The conclusions presented below were drawn from an examination of all six case studies for apparently significant issues and/or items common to some or all of the six cases. It is not claimed that these conclusions are necessarily generalizable beyond the specific pupils mentioned within each item, nor beyond the time at which this investigation took place.

1. The importance of school. All six children involved in this study, regardless of grade level or academic success, considered schooling to be important. The grade one children thought school was important mainly because they related attending school to learning to read. Grades three and six pupils thought school important because it enabled them to solve problems and to learn about and prepare for the world of work. None of the six children agreed that they would not attend school if they did not have to. The grade three boy who coped so poorly in an "open education" type of setting claimed that his teacher helped him and his classmates develop interpersonal skills -- another reason for attending school.

2. The Criteria for Academic Success. Teacher's assessments of pupil academic achievements were quite different from the actual achievements of the case study students on selected standardized tests. This is to say that when teachers were asked to rank order their pupils according to how well they did achieve or would achieve on year-end tests composed by the teachers, the teachers' rankings differed quite markedly from the ranks achieved by the children on the standardized tests. One obvious possible reason for such discrepant assessments of pupils is that the teachers' criteria did in fact differ significantly from the criteria

inherent in the standardized tests. Other reasons may also be suggested, however, and some of these are mentioned in other items below.

3. Students Selected by Teachers According to Silberman's Classifications. Even though the six case study children were randomly selected, three of them were chosen by their classroom teachers for one of Silberman's (1969) classifications. One grade three boy was chosen for "rejection", a grade three girl was chosen for "indifference", and a grade six boy was chosen for "concern". In none of the cases were Silberman's descriptions fully met. The pupil selected for "concern" was treated by the teacher (who was rated as having a moderately warm style) much more in the manner Silberman ascribes to an "indifference" student. The girl chosen for "indifference" did not appear to be treated very differently from most other pupils in her class -- although the teacher in this case was rated low in warmth and empathy. And the grade three boy chosen for "rejection" actually had a very favourable attitude towards his teacher, whom he considered treated her pupils "like adults" and who helped him through some of his socio-emotional problems. He obviously did not perceive himself as being rejected by his teacher.

4. Teachers' Judgements and their Affective Relations with Pupils. There is some evidence that teachers' judgements and ratings of pupils' academic abilities may have been influenced at least in part by their feelings toward the pupils. The grade three boy chosen by his teacher for "rejection" and the grade six boy chosen for "concern" both received much lower academic rankings from their teachers than their standardized test scores seemed to warrant. In both cases the teachers viewed the students as not fitting into the classroom instructional style adopted by the teachers, with the result that the teachers seemed

to reject or at least not accept the students.

One grade six boy, for whom the teacher had considerable respect, actually achieved at an appreciably lower standardised test rank than accorded him by the teacher. Apart from the boy's measured high DIQ, the teacher was also impressed by his youth (he was the youngest pupil in the class), his musical talents (he played the cello in music contests) and the support he received from his parents.

Finally, a grade one girl received a lower ranking from her teacher for academic achievement than she obtained on a standardised test. The measures of greatest discrepancy were in language arts -- a subject which the teacher admitted spending much time and effort on. The pupil was a lively, sociable child whom the teacher recognised as exerting pressure on her through being enthusiastic and impatient. It seems that the teacher resented this threat to her personal control needs and allowed a negative attitude to affect her judgement.

5. Teaching Methods and Learning Styles. There is evidence that teachers' adopted classroom routines and teaching methods were not suited to the case study pupils' learning styles. In the case of one grade three boy this was a fact recognised by both teacher and pupil, although no changes were attempted. In the case of one grade six boy, the teacher recognised the problem, but considered the preferred solution would be to retain the boy as a student for another year in order to effect some desired changes in the boy's learning style.

In the cases of a grade one girl and a grade three girl, the teachers' methods were unsuitable for many of the children in the room and not necessarily only particularly for the case study pupils.

The second grade six boy was fortunate in being a very intelligent, highly motivated, and competent student whose teacher admired and preferred to teach academically superior students. The boy thrived in the lessons taught by his homeroom teacher. (Unfortunately, this was the same class that partly comprised five remedial students. The teacher's methods did not vary in order to cater to the particular and special needs of these students.)

It seems reasonable to claim that at least some teachers expected pupils to adapt to their teaching methods, rather than that they should adopt methods more suited to pupil learning styles.

6. Pupil Satisfaction with Schooling. All six case study pupils expressed positive attitudes toward school regardless of academic success. The reasons for attitudes which ranged from being satisfied with school to regarding it as "fun" seemed to be related to factors such as the classroom social climate, specific friendships within the class, opportunities to satisfy activity or ego-involvement needs either during lesson time or during recess times and, possibly, the degree of satisfaction with home life.

7. Pupil Motivation. Children displayed considerable amounts of off-task and distractible, or withdrawn, or resistant classroom behaviours. For such pupils to be brought on-task in desirable ways, it seems necessary that their teachers should employ intrinsically stimulating and motivating teaching methods. Some pupils had the academic attributes to achieve at higher levels than accorded them by their teachers. Thus, it seems that teachers may have been penalizing students for the students' failure to be interested and on-task in the classroom -- rather than regarding the teacher's responsibility as one of engaging

and maintaining pupil interest.

8. Teachers' Needs and Pupils' Needs. It seems necessary to recognise and state that teachers as well as students often have needs for which satisfaction is sought in the classroom. One teacher has been identified as striving for personal control in the classroom in order to satisfy her sense of order and control needs. Another teacher frequently revealed to her class how she felt in order to help satisfy her emotional needs and the sense of frustration she often felt. A third, neophyte teacher displayed her concern and uncertainty in the classroom by being overly repressive. And a fourth, a grade six teacher who felt overly tired and over-worked, shared his problem with his class by explaining that he had not prepared his lessons properly. He required his pupils to listen to popular folk song recordings in order that they might compose poetry for presentation to the class. By his own admission, the assignment was a "time-filler" and it occurred in lessons over several days.

9. First Impressions are Lasting Impressions. This observation is related to one made earlier concerning the criteria for academic success. There is evidence to suggest that impressions or opinions formed of students by teachers early in the school year tend to persist in spite of significant changes in the pupils' achievements, behaviours, or condition -- even though these changes may be acknowledged by the teachers.

In one instance, a grade one girl had suffered a hearing disability which had persisted from before school started until December of the school year. Apparently, the disability had affected the girl's rate of learning, for, upon remediation of the handicap, the teacher noted in the pupil's report card that there had been a considerable improvement in her academic progress. The girl actually showed good improvement and middle-of-the-class rank on standardised tests, but at the end of the year the teacher persisted in ranking her very close to the bottom of the class.

A similar situation applied to a grade one boy who had presented behaviour problems earlier in the year by being frequently involved in fighting. By the end of the school year his bellicose behaviour had virtually disappeared. He proved to be a pleasant and helpful classmate, and his scores on standardised tests ranked him high in his class -- his teacher, however, still gave him a low academic rank. Ironically, in this case, the boy seemed to retain negative attitudes toward his teacher, and to have negative attitudes of social self-esteem -- neither of which was any longer justified but was apparently induced by events experienced early in the year.

A grade six boy had achieved at a very high rank on a standardised test administered in September of the school year. In the course of the year, the teacher noticed a lowering of the boy's academic achievements which she reported to the boy's parents. At the year's end, the teacher perceived the boy as ranking first in his class in academic achievement, whereas standardised tests administered in June of the school year indicated that the boy ranked at almost the seventy-fifth percentile in the class.

The examples cited above present strong evidence that teachers' affective attitudes toward pupils influenced their judgement of pupils' academic abilities (see also item 2 above), thus inducing self-fulfilling prophecies.

10. Teacher Expectancies and Pupil Academic Achievements. According to teacher expectancy theory, pupils' achievements should reflect the expectations of their teachers. In five of the six case studies this relationship held true based on the teachers' criteria for success and teachers' assessment of how well pupils met those criteria. When the criteria for and assessment of academic success were external to the teacher (e.g., through the use of standardised achievement tests), pupils showed academic achievements in spite of teacher expectancies. In four cases the children exceeded their teachers' expectations, and in one case the pupil failed to meet the teachers' expectations. When searching for teacher expectancy effects, it seems that the criteria for measuring effect must be critically examined, and the role of individual pupil differences must be carefully weighed.

11. The Social-Emotional Role of Education. The importance of social and affective dimensions of schooling is supported by the accounts of five of the six children. In these five cases it seems reasonable to claim that, for the children, social relationships were a very significant part of school life. These relationships provided for rewarding experiences which quite possibly outweighed other, more negative aspects of school -- thus allowing the children to develop positive attitudes toward their school or class. In varying degrees, all six teachers claimed to include social and affective objectives in their instructional goals. Only three of the six teachers, however, took positive steps on a continuing organisational or operational basis to incorporate such goals into their classroom instruction. In general, the positive social experience with schoolmates which five of the six pupils had seemed

incidental rather than integral to teacher goals.

In the case of one grade three class, an observer likened the social climate to Jackson's (1968) "affective desert." That the classroom was not entirely an affective desert was more attributable to the students than to the teacher.

The several items presented above do not exhaust the issues to which this study is relevant. They are, however, the issues for which best evidence was obtained during this investigation. Other evidence indicates support for Braun's (1976) "vicious cycle" of learner inputs-teacher outputs-learner inputs, and yet there is also evidence which suggests a "benign cycle" or upward spiral which benefits students. The practice of platooning can also be supported by some of the data presented in this study, while other data support the concept of the generalist teacher teaching all subjects to a homeroom class.

Perhaps the most important conclusions to be drawn from this study are in the nature of general observations, even though they are made primarily on the basis of the study of only six children. They are:

1. Each child is unique and should be treated as such.

2. Any child can be of compelling interest when subjected to intensive study.

3. Children, even at the grade one level, recognise school as playing an important and significant part in their lives.

4. Many classrooms do not yet function to meet many of the important needs of normal children.

## Recommendations

### Research

1. The study of individual cases should be an integral part of large sample studies of human behaviours. In this way, the believability of the generalized findings of the total study may be checked against reality as it exists for at least some of the sample subjects.

2. There is a need still to document what exists in the field of teaching/learning. This need can be satisfied only through naturalistic, classroom observation studies. More, and more thorough investigations of classroom behaviours should be conducted which focus on the act meaning of pupils.

3. In classroom observation studies, the threat of internal validity posed by reactive effects can be reduced to an acceptable level by an appropriate familiarization period and process, and through the investigators taking pains to be accepted as non-judgemental, expected, and even welcome visitors by both teachers and students.

4. Group research projects should be encouraged as a means of enhancing the quantity, quality, variety, and completeness of the data collected.

5. In studying children, attention should be given to the several important aspects of their lives, but most particularly to their home, school, and "outside" behaviours, activities, and relationships.

6. Ways should be found to ease the difficulties experienced in finding schools and teachers willing to take part in classroom observation studies. It is recommended that researchers find ways to provide their cooperating teachers with useful and relevant information based on their

investigation. It is also recommended that at least a minimum percentage of schools in each geographic area be equipped with architectural and technological facilities (e.g., to permit the unobtrusive audio and video recording of classroom events) necessary for conducting naturalistic classroom research.

7. Care should be taken in accepting simplistic analyses and generalisations posited by the literature dealing with research in teaching. In particular, the findings of this study point to needed caution in accepting theories related to teacher expectancy effects, and to the behavioural expression of teacher attitudes toward elementary school students as proposed by Silberman (1969).

8. Although the CASES instrument proved very useful in this study, further refinement is required in defining and interpreting on-task behaviours. Also, CASES coders should gain much preliminary experience in live situations.

9. Greater care should be taken in determining the phrasing to be used in children's questionnaires. In this study it was found that the findings of some instruments contradicted the findings of other seemingly similar instruments.

10. The maturity, percpetiveness of observation, and facility of communication possessed by some elementary school children seem well suited to their recruitment as true participant observers for micro-enthnographic study purposes.

Teacher Education

1. The case study, particularly exemplified by the Shadow Study and pupil interview, is an effective means of inducting education students

into the life and world of school children, and should form a part of teacher preparation programs.

2. Teachers are not consistent in operationalising their goal statements. Ways should be found (e.g., through self-analysis, collegial assistance, and more formal teacher counselling services) to provide for the formative evaluation of teaching behaviours of practising teachers.

3. The pre-professional and continuing education of teachers should stress the recognition of individual pupil differences and of ways to cater effectively to those differences through employment of appropriate teaching methodologies.

4. The continuing education of teachers should include effective procedures for the maintenance, interpretation, and utilisation of pupil cumulative records and reports to parents. In this way, teachers may become more aware of the shifting status of their pupils and adapt their methods accordingly.

5. Case-studies similar to those presented here should be developed to fit into an "intervention model" for the improvement of teaching/learning situations.

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# APPENDICES

# APPENDIX A

## TABLE OF PUPIL SCORES ON ALL MEASURES, WITH CLASS MEANS AND STANDARD DEVIATIONS

Table of pupil scores on all measures, with class means and standard deviations

| Variable | Max. score possible | Jodi, gr. 1 score | Jodi, gr. 1 $\overline{X}$ (S.D.) | Clive, gr. 1 score | Clive, gr. 1 $\overline{X}$ (S.D.) | Keith, gr. 3 score | Keith, gr. 3 $\overline{X}$ (S.D.) | Adele, gr. 3 score | Adele, gr. 3 $\overline{X}$ (S.D.) | Stuart, gr. 6 score | Stuart, gr. 6 $\overline{X}$ (S.D.) | Tom, gr. 6 score | Tom, gr. 6 $\overline{X}$ (S.D.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Demographic Data | | | | | | | | | | | | | |
| sex | | female | | male | | male | | female | | male | | male | |
| age (in months) | | 85 | 81.85<br>(4.46) | 88 | 82.57<br>(3.58) | 102 | 107.10<br>( 4.76) | 101 | 106.86<br>( 4.99) | 130 | 143.36<br>( 5.40) | 140 | 141.76<br>(4.45) |
| Blishen socio-economic status | | 68.32 | 51.57<br>(15.23) | 52.86 | 41.35<br>(8.86) | 40.7 | 52.27<br>(15.93) | 34.38 | 47.23<br>(12.74) | 74.27 | 49.5<br>(13.7) | 65.78 | 47.70<br>(16.84) |
| no. of discipline referrals | | 0 | 0.07<br>(0.26) | 1 | 0.24<br>(0.68) | 1 | 0.45<br>(0.80) | 0 | 1.82<br>(1.93) | 0 | 1.80<br>(3.22) | 0 | 1.32<br>(1.38) |
| days absent from school | | 4.5 | 9.30<br>(9.19) | 7.0 | 9.26<br>(9.06) | 27 | 7.37<br>(6.07) | 13.5 | 7.34<br>(6.69) | 8.0 | 7.32<br>(5.55) | 2.0 | 6.40<br>(6.45) |
| attended kindergarten | | yes | | yes | | yes | | yes | | yes | | yes | |
| mother's occupation | | real estate | | works | | homemaker | | homemaker | | homemaker | | homemaker | |
| family integrity | | one unit | | one unit | | one unit | | one unit | | one unit | | one unit | |
| sibling position | | middle (4) | | youngest | | oldest | | middle (3) | | middle (3) | | twin | |
| health status | | good | | good | | good | | good | | good | | good | |
| disabilities | | none | | none | | hearing | | none | | spectacles | | none | |
| Attitudes | | | | | | | | | | | | | |
| MCI: | | | | | | | | | | | | | |
| total | 135 | 113 | 101.44<br>(9.28) | 103 | 100.33<br>(7.26) | 85 | 98.87<br>(7.31) | 99 | 98.36<br>(7.89) | 109 | 96.32<br>(7.09) | 93 | 91.96<br>(6.89) |
| satisfaction with the class | 27 | 21 | 21.07<br>(3.55) | 25 | 23.57<br>(1.65) | 27 | 24.55<br>(2.42) | 21 | 19.50<br>(5.20) | 27 | 21.96<br>(3.63) | 19 | 18.76<br>(4.94) |
| friction | 27 | 21 | 20.63<br>(4.15) | 19 | 19.19<br>(4.04) | 11 | 19.39<br>(4.08) | 21 | 20.00<br>(4.29) | 27 | 20.20<br>(4.56) | 23 | 20.44<br>(3.32) |
| competitiveness | 27 | 25 | 22.25<br>(3.22) | 21 | 19.48<br>(2.89) | 13 | 21.39<br>(3.98) | 25 | 22.64<br>(3.25) | 23 | 19.56<br>(4.68) | 21 | 19.72<br>(3.83) |

| Variable | Max. score possible | Jodi, gr. 1 | | Clive, gr. 1 | | Keith, gr. 3 | | Adele, gr. 3 | | Stuart, gr. 6 | | Tom, gr. 6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) |
| difficulty | 27 | 21 | 15.74<br>(3.32) | 15 | 14.24<br>(3.05) | 11 | 12.87<br>(3.13) | 13 | 14.14<br>(3.04) | 13 | 13.32<br>(3.18) | 11 | 14.60<br>(3.30) |
| cohesiveness | 27 | 25 | 21.74<br>(2.66) | 23 | 23.86<br>(2.44) | 23 | 20.74<br>(4.33) | 19 | 22.07<br>(2.10) | 19 | 21.28<br>(4.15) | 19 | 18.44<br>(3.23) |
| OSAT: | | | | | | | | | | | | | |
| total | 110 | 91 | 91.33<br>(8.08) | 70 | 99.43<br>(9.18) | 101 | 98.68<br>(6.45) | 87 | 93.36<br>(5.83) | | | | |
| general school attitude | 20 | 14 | 16.74<br>(2.65) | 18 | 18.29<br>(1.39) | 14 | 16.45<br>(2.20) | 15 | 15.36<br>(2.64) | | | | |
| student-instruction interaction | 84 | 67 | 65.04<br>(5.93) | 47 | 71.00<br>(7.76) | 76 | 72.30<br>(4.38) | 63 | 67.14<br>(3.60) | | | | |
| interpersonal relationships | 12 | 10 | 9.56<br>(2.04) | 5 | 10.14<br>(1.86) | 11 | 9.90<br>(1.57) | 9 | 9.86<br>(1.64) | | | | |
| WSAT: | | | | | | | | | | | | | |
| total | 138 | | | | | | | | | 114 | 102.12<br>(10.91) | 104 | 101.80<br>(9.44) |
| interpersonal relationships | 27 | | | | | | | | | 20 | 20.12<br>(3.49) | 19 | 18.48<br>(2.00) |
| student-instruction interaction | 78 | | | | | | | | | 67 | 58.52<br>(7.14) | 63 | 58.76<br>(6.02) |
| general school attitude | 33 | | | | | | | | | 27 | 23.48<br>(3.71) | 24 | 24.56<br>(3.54) |
| SEI: | | | | | | | | | | | | | |
| total | 100 | 80 | 68.74<br>(16.59) | 62 | 75.43<br>(12.73) | 72 | 61.29<br>(16.75) | 68 | 66.14<br>(17.45) | 86 | 59.04<br>(15.29) | 90 | 70.16<br>(14.59) |
| general self-esteem | 52 | 38 | 34.82<br>(7.72) | 34 | 39.14<br>(7.65) | 42 | 31.16<br>(8.97) | 34 | 34.79<br>(8.22) | 46 | 32.74<br>(7.84) | 48 | 36.64<br>(7.10) |

| Variable | Max. score possible | Jodi, gr. 1 | | Clive, gr. 1 | | Keith, gr. 3 | | Adele, gr. 3 | | Stuart, gr. 6 | | Tom, gr. 6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) |
| social self-esteem (peers) | 16 | 14 | 11.19<br>(4.05) | 8 | 11.43<br>(2.40) | 8 | 10.07<br>(3.75) | 8 | 11.21<br>(3.31) | 12 | 10.00<br>(3.62) | 12 | 12.00<br>(2.99) |
| home self-esteem (parents) | 16 | 14 | 10.67<br>(3.49) | 8 | 12.19<br>(2.95) | 10 | 10.32<br>(3.91) | 10 | 10.50<br>(4.40) | 14 | 8.72<br>(4.07) | 16 | 11.60<br>(3.88) |
| school self esteem (academic) | 16 | 14 | 12.15<br>(3.08) | 12 | 12.67<br>(2.78) | 12 | 9.74<br>(3.24) | 16 | 9.64<br>(4.69) | 14 | 8.08<br>(3.27) | 14 | 9.92<br>(3.32) |
| lie scale | 8 | 2 | 3.93<br>(1.84) | 8 | 5.81<br>(1.68) | 7 | 5.77<br>(1.93) | 4 | 6.46<br>(1.45) | 7 | 7.04<br>(0.77) | 6 | 7.20<br>(0.94) |
| PCAS: | | | | | | | | | | | | | |
| total | 84 | | | | | 57 | 58.55<br>(10.16) | 79 | 48.86<br>(14.93) | 64 | 52.17<br>(9.85) | 61 | 47.84<br>(9.20) |
| attitude to school | 6 | | | | | 6 | 4.84<br>(1.25) | 6 | 2.93<br>(1.93) | 4 | 3.72<br>(1.45) | 2 | 3.00<br>(1.55) |
| interest in schoolwork | 6 | | | | | 5 | 4.23<br>(1.38) | 6 | 2.96<br>(1.57) | 4 | 3.00<br>(1.08) | 5 | 2.48<br>(1.10) |
| importance of doing well (school) | 10 | | | | | 4 | 7.90<br>(1.65) | 10 | 7.36<br>(1.87) | 10 | 7.48<br>(1.60) | 4 | 6.88<br>(1.53) |
| attitude to class | 16 | | | | | 15 | 13.45<br>(3.07) | 14 | 10.29<br>(4.28) | 15 | 13.24<br>(3.15) | 15 | 9.32<br>(3.57) |
| 'other' image of class | 6 | | | | | 5 | 3.58<br>(1.39) | 5 | 2.82<br>(1.34) | 2 | 2.08<br>(1.30) | 4 | 2.80<br>(1.33) |
| conforming vs. non-conforming pupil | 5 | | | | | 3 | 3.71<br>(1.02) | 4 | 3.39<br>(1.23) | 2 | 2.00<br>(0.87) | 4 | 2.52<br>(0.90) |
| relationship with teacher | 6 | | | | | 3 | 4.26<br>(1.54) | 5 | 2.43<br>(1.43) | 6 | 4.08<br>(1.52) | 6 | 3.24<br>(1.45) |
| anxiety in the classroom* | 6 | | | | | 3 | 2.61<br>(1.75) | 6 | 3.18<br>(1.44) | 2 | 2.28<br>(1.55) | 4 | 3.52<br>(1.45) |
| social adjustment | 6 | | | | | 2 | 2.39<br>(1.21) | 5 | 2.25<br>(1.35) | 3 | 3.04<br>(1.11) | 4 | 2.84<br>(1.08) |

| Variable | Max. score possible | Jodi, gr. 1 |  | Clive, gr. 1 |  | Keith, gr. 3 |  | Adele, gr. 3 |  | Stuart, gr. 6 |  | Tom, gr. 6 |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) |
| academic self-image | 18 |  |  |  |  | 11 | 11.58<br>(3.85) | 18 | 11.25<br>(3.56) | 16 | 11.52<br>(3.80) | 13 | 11.24<br>(3.43) |
| *high score = less anxious |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Abilities |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MRT - Sept. 1975: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| raw score total | 102 | 53 | 63.91<br>(10.55) | 84 | 68.14<br>(13.61) |  |  |  |  |  |  |  |  |
| percentile rank |  | 46 | 68.09<br>(19.34) | 98 | 75.05<br>(23.10) |  |  |  |  |  |  |  |  |
| word meaning | 16 | 8 | 9.91<br>(2.38) | 14 | 11.00<br>(2.53) |  |  |  |  |  |  |  |  |
| listening | 16 | 10 | 9.65<br>(2.96) | 13 | 10.14<br>(2.68) |  |  |  |  |  |  |  |  |
| matching | 14 | 4 | 8.91<br>(2.89) | 14 | 9.67<br>(3.12) |  |  |  |  |  |  |  |  |
| alphabet | 16 | 15 | 14.52<br>(2.81) | 13 | 14.10<br>(2.41) |  |  |  |  |  |  |  |  |
| numbers | 26 | 12 | 14.09<br>(2.55) | 18 | 14.86<br>(3.83) |  |  |  |  |  |  |  |  |
| copying | 14 | 4 | 6.91<br>(3.19) | 12 | 8.38<br>(3.12) |  |  |  |  |  |  |  |  |
| MAT - Sept. 1975: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| total reading score |  |  |  |  |  | 62 | 63.77<br>(13.86) | 52 | 63.77<br>(12.34) | 107 | 93.47<br>(14.10) | 82 | 77.44<br>(8.46) |
| percentile rank |  |  |  |  |  | 70 | 59.42<br>(29.26) | 28 | 59.89<br>(27.18) | 98 | 74.06<br>(24.74) | 46 | 44.00<br>(21.78) |

| Variable | Max. score possible | Jodi, gr. 1 | | Clive, gr. 1 | | Keith, gr. 3 | | Adele, gr. 3 | | Stuart, gr. 6 | | Tom, gr. 6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) |
| word knowledge score | | | | | | 64 | 64.69<br>(12.00) | 55 | 64.92<br>(12.13) | 101 | 92.24<br>(13.21) | 79 | 77.48<br>(7.31) |
| word analysis (grade 3), language (grade 6) score | | | | | | 61 | 61.39<br>(5.90) | 58 | 60.31<br>(6.26) | 92 | 89.29<br>(7.15) | 79 | 82.74<br>(7.24) |
| reading score | | | | | | 60 | 62.50<br>(14.50) | 51 | 63.62<br>(11.00) | 111 | 92.77<br>(11.79) | 84 | 77.65<br>(9.53) |
| spelling score | | | | | | 58 | 64.89<br>(7.76) | 55 | 62.62<br>(8.90) | 107 | 88.47<br>(13.50) | 79 | 78.00<br>(13.82) |
| total math score | | | | | | 55 | 60.08<br>(9.56) | 53 | 64.19<br>(11.72) | 100 | 94.88 | 88 | |
| percentile rank | | | | | | 34 | 52.50<br>(27.64) | 32 | 62.62<br>(29.01) | 92 | 82.94 | | |
| math computation | | | | | | 37 | 54.81<br>(9.12) | 48 | 58.15<br>(11.96) | 98 | 90.12 | 84 | |
| math concepts | | | | | | 65 | 61.31<br>(10.23 | 53 | 61.42<br>(11.07) | 98 | 92.24 | 80 | |
| math problems | | | | | | 58 | 58.15<br>(13.07) | 47 | 65.04<br>(14.73) | 93 | 91.18 | 89 | |
| MAT - June, 1976: | | | | | | | | | | | | | |
| total reading score | | 51 | 50.67<br>(8.79) | 48 | 49.81<br>(11.88) | 77 | 71.94<br>(11.06) | 60 | 72.75<br>(11.29) | 103 | 96.58<br>(11.64) | 94 | 83.00<br>(7.20) |
| percentile rank | | 90 | 82.41<br>(19.84) | 86 | 81.24<br>(27.07) | 89 | 73.26<br>(20.00) | 46 | 74.18<br>(22.11) | 92 | 76.08<br>(22.54) | 78 | 47.16<br>(19.94) |
| word knowledge score | | 57 | 53.89<br>(11.15) | 49 | 52.24<br>(9.31) | 74 | 72.55<br>(9.26) | 67 | 72.21<br>(10.02) | 106 | 94.29<br>(12.86) | 90 | 82.76<br>(6.45) |
| word analysis (grade 1) or language (grades 3, 6) score | | 49 | 48.33<br>(9.12) | 39 | 47.91<br>(9.35) | 70 | 75.07<br>(8.95) | 60 | 67.79<br>(13.59) | 93 | 93.75<br>(8.64) | 88 | 85.56<br>(6.38) |

| Variable | Max. score possible | Jodi, gr. 1 |  | Clive, gr. 1 |  | Keith, gr. 3 |  | Adele, gr. 3 |  | Stuart, gr. 6 |  | Tom, gr. 6 |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) |
| Math effort | 4.0 | 2.0 | 1.96<br>(0.20) | 2.0 | 2.19<br>(0.96) |  | 2.61<br>(0.56) | 1.0 | 2.30<br>(0.75) |  |  |  |  |
| Math achievement | 4.0 | 2.0 | 1.96<br>(0.35) | 2.0 | 2.10<br>(0.81) |  | 2.57<br>(0.49) | 1.0 | 2.80<br>(1.05) |  |  |  |  |
| Other subjects effort | 12.0 | 6.0 | 6.00<br>(0.28) | 7.0 | 6.95<br>(0.95) |  | 8.54<br>(0.73) | 3.0 | 6.95<br>(1.85) |  |  |  |  |
| Other subjects achievement | 12.0 | 6.0 | 6.00<br>(0.28) | 6.0 | 6.67<br>(0.78) |  | 8.54<br>(0.73) | 4.0 | 7.30<br>(1.82) |  |  |  |  |
| Social studies effort | 4.0 |  |  |  |  |  |  |  |  | 3.0 | 2.59<br>(0.52) |  |  |
| Social studies achievement | 4.0 |  |  |  |  |  |  |  |  | 3.0 | 2.44<br>(0.76) |  |  |
| **Teacher's Report** - **Spring**: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| group participation | 16.0 | No Report |  | 8.0 | 8.88<br>(1.63) | No Report |  | 7.0 | 9.61<br>(2.01) | No Report |  | 9.0 | 9.60<br>(2.47) |
| individual participation | 16.0 | By Teacher |  | 8.0 | 9.13<br>(1.38) | By Teacher |  | 7.0 | 10.27<br>(2.12) | By Teacher |  | 8.0 | 9.28<br>(2.47) |
| working skills | 12.0 |  |  | 6.0 | 6.23<br>(1.27) |  |  | 3.0 | 6.96<br>(2.16) |  |  | 5.0 | 6.28<br>(2.66) |
| LA effort | 24.0 |  |  | 12.0 | 13.19<br>(1.83) |  |  | 9.0 | 13.79<br>(2.54) |  |  | 11.0 | 14.12<br>(3.73) |
| LA achievement | 24.0 |  |  | 12.0 | 12.62<br>(1.86) |  |  | 10.0 | 13.73<br>(2.64) |  |  | 10.0 | 13.55<br>(4.04) |
| Math effort | 4.0 |  |  | 2.0 | 2.35<br>(1.00) |  |  | 1.0 | 2.41<br>(0.70) |  |  |  |  |
| Math achievement | 4.0 |  |  | 2.0 | 2.03<br>(0.86) |  |  | 1.5 | 2.41<br>(0.77) |  |  |  |  |
| Other subjects effort | 12.0 |  |  | 7.0 | 8.00<br>(1.52) |  |  | 5.0 | 6.66<br>(1.55) |  |  |  |  |

| Variable | Max. score possible | Jodi, gr. 1 |  | Clive, gr. 1 |  | Keith, gr. 3 |  | Adele, gr. 3 |  | Stuart, gr. 6 |  | Tom, gr. 6 |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) |
| reading score |  | 51 | 51.52 (9.00) | 49 | 50.24 (15.78) | 80 | 71.29 (13.12) | 52 | 74.18 (12.87) | 97 | 96.88 (10.50) | 97 | 82.32 (8.46) |
| spelling score |  |  |  | 68 | 71.55 (9.76) | 65 | 74.07 (9.81) | 101 | 91.42 (12.57) | 82 | 82.00 (13.32) | 82 | 82.00 (13.32) |
| total math score |  | 44 | 44.00 (7.02) | 47 | 48.33 (7.23) | 81 | 79.9 (10.81) | 65 | 78.29 (10.42) |  |  |  |  |
| percentile rank |  | 54 | 54.11 (20.03) | 62 | 64.93 (16.73) | 80 | 73.55 (24.26) | 32 | 68.82 (24.63) |  |  |  |  |
| math computation |  |  |  |  |  | 72 | 74.29 (11.02) | 57 | 68.07 (9.29) |  |  |  |  |
| math concepts |  |  |  |  |  | 75 | 75.74 (19.93) | 59 | 76.86 (10.04) |  |  |  |  |
| math problems |  |  |  |  |  | 79 | 77.42 (13.16) | 71 | 78.79 (13.59) |  |  |  |  |
| social studies |  |  |  |  |  |  |  |  |  | 40 | 36.13 (6.19) |  |  |
|  |  |  |  |  |  |  |  |  |  | 82 | 68.42 |  |  |
| Teacher's Report - Winter |  |  |  |  |  |  |  |  |  |  |  |  |  |
| group participation | 16.0 | 8.0 | 7.79 (0.82) | 6.0 | 8.24 (1.31) | Absent | 10.64 (1.17) | 6.0 | 9.52 (1.98) | 12.0 | 9.57 (2.72) | 9.0 | 9.50 (2.75) |
| individual participation | 16.0 | 8.0 | 7.83 (0.80) | 7.0 | 8.19 (1.01) | From | 10.57 (1.02) | 8.0 | 10.38 (1.89) | 14.0 | 10.39 (2.53) | 8.0 | 9.29 (2.28) |
| working skills | 12.0 | 6.0 | 5.88 (0.60) | 5.0 | 5.67 (1.58) | School | 7.96 (1.24) | 3.0 | 7.11 (2.14) | 9.0 | 7.74 (1.82) | 5.0 | 6.42 (2.60) |
| LA effort | 24.0 | 12.0 | 11.88 (0.60) | 10.00 | 12.00 (1.95) |  | 15.14 (1.46) | 8.0 | 13.82 (2.83) | 18.0 | 14.83 (2.10) | 11.0 | 14.70 (4.00) |
| LA achievement | 24.0 | 12.0 | 11.88 (1.45) | 11.0 | 11.62 (1.86) |  | 15.11 (1.50) | 9.5 | 13.91 (2.79) | 18.0 | 14.09 (2.67) | 10.0 | 13.38 (4.18) |

| Variable | Max. score possible | Jodi, gr. 1 | | Clive, gr. 1 | | Keith, gr. 3 | | Adele, gr. 3 | | Stuart, gr. 6 | | Tom, gr. 6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) |
| Other subjects achievement | 12.0 | | | 7.0 | 7.80<br>(1.53) | | | 4.5 | 6.66<br>(1.53) | | | | |
| Social studies effort | 4.0 | | | | | | | | | | | | |
| Social studies achievement | 4.0 | | | | | | | | | | | | |
| Teacher's Report - Summer 1976: | | | | | | | | | | | | | |
| group participation | 16.0 | 8.0 | 7.85<br>(0.76) | 8.5 | 9.67<br>(2.13) | 9.0 | 12.00<br>(1.83) | 6.0 | 10.36<br>(2.36) | 16.0 | 11.26<br>(3.00) | 9.0 | 10.24<br>(2.76) |
| individual participation | 16.0 | 8.0 | 7.85<br>(0.76) | 8.0 | 10.24<br>(2.45) | 8.0 | 11.55<br>(1.74) | 6.0 | 10.82<br>(2.29) | 16.0 | 11.38<br>(3.29) | 8.0 | 9.76<br>(2.55) |
| working skills | 12.0 | 6.0 | 5.96<br>(0.69) | 6.0 | 6.91<br>(2.40) | 6.0 | 8.55<br>(1.58) | 4.5 | 7.55<br>(2.07) | 12.0 | 8.78<br>(2.58) | 5.0 | 6.96<br>(2.51) |
| LA effort | 24.0 | 14.0 | 13.41<br>(2.11) | 12.5 | 14.75<br>(2.79) | 16.0 | 18.13<br>(1.84) | 10.05 | 15.50<br>(3.05) | 24.0 | 18.00<br>(3.49) | 12.0 | 15.14<br>(3.70) |
| LA achievement | 24.0 | 12.0 | 12.56<br>(2.18) | 13.0 | 14.86<br>(2.85) | 16.0 | 18.03<br>(1.80) | 10.0 | 15.02<br>(3.16) | 24.0 | 16.80<br>(4.63) | 11.0 | 14.42<br>(4.22) |
| Math effort | 4.0 | 2.0 | 2.27<br>(0.52) | 2.0 | 2.60<br>(0.88) | 2.0 | 3.29<br>(0.77) | 2.0 | 2.88<br>(0.83) | | | | |
| Math achievement | 4.0 | 2.0 | 2.15<br>(0.53) | 2.0 | 2.48<br>(0.79) | 2.0 | 3.07<br>(0.72) | 2.0 | 2.89<br>(0.99) | | | | |
| Other subjects effort | 12.0 | 6.0 | 6.00<br>(0.28) | 8.0 | 8.55<br>(1.77) | 8.0 | 9.32<br>(1.15) | 5.0 | 7.98<br>(1.59) | | | | |
| Other subjects achievement | 12.0 | 6.0 | 6.00<br>(0.28) | 8.0 | 8.50<br>(1.71) | 8.0 | 9.19<br>(0.96) | 4.5 | 7.82<br>(1.60) | | | | |
| Social studies effort | 4.0 | | | | | | | | | 4.0 | 3.12<br>(0.65) | | |
| Social studies achievement | 4.0 | | | | | | | | | 4.0 | 2.90<br>(.075) | | |

| Variable | Max. score possible | Jodi, gr. 1 |  | Clive, gr. 1 |  | Keith, gr. 3 |  | Adele, gr. 3 |  | Stuart, gr. 6 |  | Tom, gr. 6 |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) |
| **Attributes** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| IQ: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PPVT score | 150 | 102 | 111.19<br>(16.68) | 131 | 115.33<br>(15.79) |  |  |  |  |  |  |  |  |
| percentile |  | 58 | 67.37<br>(24.97) | 98 | 75.14<br>(24.80) |  |  |  |  |  |  |  |  |
| Lorge-Thorndike: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| total D.I.Q. |  |  |  |  |  | 115 | 110.60<br>(15.93) | 110 | 114.25<br>(13.68) | 138 | 113.08<br>(15.31) | 107.5 | 104.56<br>(9.49) |
| verbal D.I.Q. |  |  |  |  |  | 122 | 111.40<br>(17.04) | 106 | 112.32<br>(14.74) | 145 | 110.50<br>(17.36) | 115 | 97.72<br>(11.34) |
| percentile |  |  |  |  |  | 96 | 84.00<br>(19.72) | 72 | 85.68<br>(16.19) | 99 | 75.58<br>(30.22) | 91 | 50.60<br>(28.16) |
| nonverbal D.I.Q. |  |  |  |  |  | 107 | 108.55<br>(16.83) | 131 | 115.61<br>(14.59) | 131 | 115.29<br>(15.98) | 100 | 110.80<br>(11.83) |
| percentile |  |  |  |  |  | 75 | 74.36<br>(22.87) | 83 | 85.29<br>(18.11) | 96 | 84.42<br>(22.17) | 59 | 78.36<br>(20.02) |
| Teacher's Ranking of Pupil: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| perceived achievement level cf expectations in LA |  | exceeded |  | met |  | below |  | far below |  | exceeded |  | below |  |
| perceived achievement level of cf expectations in Math (Social Studies) |  | exceeded |  | met |  | below |  | below |  | exceeded |  |  |  |
| perceived reaction to classroom activities |  | enthusiastic |  | interested |  | interested |  | uninterested |  | enthusiastic |  | interested |  |
| academic ability |  | average |  | average |  | bright |  | below average |  | very bright |  | average |  |

| Variable | Max. score possible | Jodi, gr. 1 |  | Clive, gr. 1 |  | Keith, gr. 3 |  | Adele, gr. 3 |  | Stuart, gr. 6 |  | Tom, gr. 6 |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) |
| projected rank in LA |  | 20th | (N = 22) | 12th | (N = 22) | 22nd | (N = 31) | 24th | (N = 28) | 1st | (N = 26) | 20th | (N = 26) |
| projected rank in Math |  | 15th |  | 12th |  | 24th |  | 22nd |  |  |  |  |  |
| projected rank in Social Studies |  |  |  |  |  |  |  |  |  | 1st |  |  |  |
| projected rank Overall |  | 16th |  | 12th |  | 25th |  | 25th |  | 1st |  | 23rd |  |
| **Sociometric Status** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Silberman pupil selection:** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| attachment |  |  |  |  |  |  |  |  |  |  |  |  |  |
| concern |  |  |  |  |  |  |  |  |  |  |  |  |  |
| indifference |  |  |  |  |  |  |  |  |  |  |  | 4th |  |
| rejection |  |  |  |  |  | 3rd | (1) | 1st | (1) |  |  |  |  |
| **Peer Nominations:** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| total (chosen by classmates) |  | 9 | 9.89<br>(7.75) | 19 | 10.05<br>(4.31) | 6 | 8.55<br>(5.79) | 8 | 8.64<br>(6.68) | 8 | 8.92<br>(7.03) | 6 | 8.60<br>(6.02) |
| like to sit with |  | 2 | 3.00<br>(2.81) | 9 | 3.00<br>(2.40) | 1 | 2.84<br>(2.16) | 2 | 2.89<br>(2.87) | 3 | 3.00<br>(2.70) | 2 | 3.00<br>(2.04) |
| like to work with |  | 3 | 2.89<br>(2.96) | 4 | 3.00<br>(1.77) | 1 | 2.77<br>(2.30) | 3 | 2.86<br>(2.53) | 4 | 2.96<br>(2.63) | 2 | 2.88<br>(1.80) |
| like to play with |  | 4 | 3.00<br>(2.34) | 6 | 3.00<br>(1.54) | 4 | 2.94<br>(1.87) | 3 | 2.89<br>(1.90) | 1 | 2.96<br>(2.34) | 2 | 2.72<br>(2.62) |

| Variable | Max. score possible | Jodi, gr. 1 | | Clive, gr. 1 | | Keith, gr. 3 | | Adele, gr. 3 | | Stuart, gr. 6 | | Tom, gr. 6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) |
| **Parent Data** | | | | | | | | | | | | | |
| PATES: | | | | | | | | | | | | | |
| total | 120 | 77 | 78.2 (14.35) | 93 | 76.22 (9.99) | 74 | 77.1 (9.81) | 78 | 77.92 (11.34) | 82 | 80.03 (10.80) | 88 | |
| parents education: | | | | | | | | | | | | | |
| mother | | grade 12 | | 1 year college | | grade 12 | | grade 11 | | 1 year college | | grade 12 | |
| father | | grade 12 | | grade 12 | | grade 12 | | grade 9 | | 4 years college | | grade 10 | |
| Parents' perception of child: | | | | | | | | | | | | | |
| ability cf classmates | | same | | same | | same | | less | | much later | | same | |
| Parents' expectation for child: | | | | | | | | | | | | | |
| formal education completed | | 4 years college | | grade 12 | | grade 12 | | grade 12 | | 4 years college | | grade 12 | |
| type of employment expected for child | | primary teacher/ veterinary worker | | degree/trade apprenticeship | | engineer/draftsman/armed forces | | nurse | | nil response | | accountantant/ office worker | |
| **Classroom Behaviours** | | | | | | | | | | | | | |
| Overall CASES Coefficient: | | | | | | | | | | | | | |
| all subjects in TD settings | | 5.01 | 5.48 (0.44) | 5.79 | 5.24 (0.42) | 4.64 | 4.64 (0.50) | 4.14 | 4.93 (0.44) | 6.19 | 5.55 (0.45) | 5.05 | 5.01 (0.36) |
| all subjects in NTD settings | | 6.83 | 6.89 (0.49) | 7.75 | 7.52 (0.50) | 5.29 | 6.35 (0.82) | 7.01 | 6.86 (0.81) | 7.57 | 7.24 (0.49) | 6.68 | 6.48 (1.73) |
| LA in TD settings | | 5.15 | 5.46 (0.40) | 5.67 | 5.19 (0.41) | 4.76 | 4.71 (1.05) | 4.02 | 4.95 (0.48) | 6.19 | 5.62 (0.47) | 5.05 | 4.99 (0.37) |
| LA in NTD settings | | 6.83 | 6.83 (0.51) | 7.46 | 7.60 (0.50) | 5.96 | 5.90 (2.21) | 7.02 | 6.82 (0.97) | 7.79 | 7.28 (0.62) | 6.68 | 6.48 (1.73) |
| Math in TD settings | | 4.43 | 5.04 (2.20) | 6.33 | 4.56 (2.33) | 4.51 | 4.64 (0.35) | 4.15 | 4.08 (1.96) | | | | |
| Math (Social Studies) in NTD settings | | | | 8.30 | 4.80 (3.50) | 5.41 | 6.26 (0.69) | 6.62 | 6.96 (1.08) | 7.49 | 7.25 (0.61) | | |

| Variable | Max. score possible | Jodi, gr. 1 score | $\overline{X}$ (S.D.) | Clive, gr. 1 score | $\overline{X}$ (S.D.) | Keith, gr. 3 score | $\overline{X}$ (S.D.) | Adele, gr. 3 score | $\overline{X}$ (S.D.) | Stuart, gr. 6 score | $\overline{X}$ (S.D.) | Tom, gr. 6 score | $\overline{X}$ (S.D.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CASES Classification (%): | | | | | | | | | | | | | |
| desirable in all subjects TD/NTD settings | | 80.61 | (84.39) | 75.97 | (83.60) | 61.37 | (70.51) | 78.44 | (82.86) | 90.63 | (87.38) | 82.93 | (74.86) |
| desirable in LA | | 80.95 | (83.96) | 76.33 | (83.78) | 60.59 | (68.53) | 77.08 | (82.18) | 93.7 | (88.41) | 82.93 | (74.25) |
| desirable in Math* | | 76.67 | (87.36) | 35.07 | (87.31) | 67.47 | (78.89) | 75.28 | (85.28) | 87.58 | (84.84) | | |
| desirable in TD settings | | 80.50 | (26.50) | 62.43 | (78.49) | 67.14 | (71.85) | 67.52 | (82.39) | 91.26 | (87.85) | 83.68 | (74.54) |
| desirable in NTD setting | | 80.70 | (83.20) | 85.77 | (87.34) | 55.47 | (69.06) | 84.73 | (83.28) | 90.32 | (87.12) | 80.36 | (76.18) |
| inappropriate in all subjects TD/NTD settings | | 16.28 | (14.62) | 23.54 | (15.92) | 37.91 | (28.89) | 20.94 | (16.81) | 9.06 | (12.24) | 17.07 | (24.88) |
| inappropriate in LA | | 16.08 | (15.09) | 23.67 | (15.73) | 38.82 | (29.75) | 22.92 | (17.52) | 6.29 | (11.20) | 17.07 | (25.47) |
| inappropriate in Math* | | 20.00 | (11.34) | 14.93 | (12.44) | 32.53 | (20.49) | 24.72 | (14.47 | 11.80 | (14.82) | | |
| inappropriate in TD settings | | 18.24 | (12.44) | 37.57 | (21.18) | 32.14 | (27.66) | 31.62 | (17.11) | 8.74 | (11.81) | 16.32 | (25.19) |
| inappropriate in NTD settings | | 14.91 | (15.83) | 13.39 | (11.57) | 43.80 | (30.22) | 14.38 | (16.53) | 9.21 | (12.47) | 19.64 | (23.59) |
| unacceptable in all subjects TD/NTD settings | | 3.10 | (0.99) | 0.49 | (0.48) | 0.72 | (0.61) | 0.63 | (0.34) | 0.31 | (0.38) | 0.00 | (0.26) |
| unacceptable in LA | | 3.08 | (0.94) | 0.00 | (0.49) | 0.59 | (0.65) | 0.00 | (0.30) | 0.00 | (0.39) | 0.00 | (0.27) |
| unacceptable in Math* | | 3.33 | (1.31) | 0.00 | (0.24) | 0.00 | (0.36) | 0.00 | (0.26) | 0.62) | (0.34) | | |
| unacceptable in TD settings | | 1.26 | (1.03) | 0.00 | (0.33) | 0.71 | (0.50) | 0.85 | (0.50) | 0.00 | (0.34) | 0.00 | (0.26) |
| unacceptable in NTD settings | | 4.39 | (0.97) | 0.84 | (0.60) | 0.73 | (0.72) | 0.49 | (0.19) | 0.46 | (0.41) | 0.00 | (0.24) |
| *Social studies in Stuart's class | | | | | | | | | | | | | |
| DICOS Interactions: | | | | | | | | | | | | | |
| grand total | | 55 | (51.89) | 80 | (62.01) | 32 | (33.10) | 42 | (46.10) | 43 | (29.48) | 4 | (24.38) |
| total public | | 2 | (6.56) | 44 | (21.36) | 10 | (9.65) | 22 | (28.25) | | | | |
| total private | | 53 | (45.33) | 36 | (40.65) | 22 | (23.45) | 20 | (17.85) | | | | |

| Variable | Max. score possible | Jodi, gr. 1 | | Clive, gr. 1 | | Keith, gr. 3 | | Adele, gr. 3 | | Stuart, gr. 6 | | Tom, gr. 6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) | score | $\overline{X}$ (S.D.) |
| LA public | | 2 | (5.78) | 42 | (18.50) | 7 | (5.13) | 20 | (22.89) | 26 | (12.28) | 3 | (15.69) |
| LA private | | 42 | (33.04) | 27 | (32.20) | 15 | (18.77) | 14 | (11.39) | 17 | (17.20) | 1 | (8.69) |
| Math public | | 0 | (0.78) | 2 | (2.86) | 3 | (4.52) | 2 | (5.36) | | | | |
| Math private | | 11 | (12.30) | 9 | (8.45) | 7 | (4.68) | 6 | (6.46) | | | | |

# APPENDIX B

## COPING ANALYSIS SCHEDULE FOR EDUCATIONAL SETTINGS (CASES)

1. CASES Categories (Brief form for quick reference)
2. CASES Styles -- work sheet
3. CASES Classifications-- DIU worksheet

## CASES
### (Brief Form for Quick Reference)

1 **Aggressive Behavior**: Direct attack - grabbing, pushing, hitting, pulling, kicking, name-calling; destroying property - smashing, tearing, breaking.

2 **Negative (Inappropriate) Attention-Getting Behavior**: Annoying, bothering, whining, loud talking (unnecessarily), attention-getting aversive noise-making, belittling, criticizing.

3a or 3b **Manipulating, Controlling, and Directing Others**: Manipulating, bossing, commanding, directing, enforcing rules, conniving, wheedling, controlling.

4 **Resisting**: Resisting, delaying; passive aggressive behavior; pretending to conform, conforming to the letter but not the spirit; defensive checking.

5a or 5b **Self-Directed Activity**: Productive working; reading, writing, constructing with interest; self-directed dramatic play (with high involvement).

6a or 6b **Paying Close Attention; Thinking, Pondering**: Listening attentively, watching carefully; concentrating on a story being told, a film being watched, a record played; thinking, pondering, reflecting.

7a or 7b **Integrative Sharing and Helping**: Contributing ideas, interests, mateials, helping; responding by showing feelings (laughing, smiling, etc.) in audience situations; initiating conversation.

8a or 8b **Integrative Social Interaction**: Mutual give and take, cooperative behavior, integrative social behavior; studying or working together where participants are on a par.

9a or 9b **Integrative Seeking and Receiving Support, Assistance, and Information**: Bidding or asking teachers or significant peers for help, support, sympathy, affection, etc., being helped; receiving assistance.

10 **Following Directions Passively and Submissively**: Doing assigned work without enthusiasm or great interest; submitting to requests; answering direct questions; waiting for instructions as directed.

11 **Observing Passively**: Visual wandering with short fixations; watching others work; checking on noises or movements; checking on activities of adults or peers.

12 **Responding to Internal Stimuli**: Daydreaming; sleeping; rocking or fidgeting (not in transaction with external stimuli).

13 **Physical Withdrawal or Passive Avoidance**: Moving away; hiding; avoiding transactions by movement away or around; physical wandering avoiding involvement in activities.

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## CASES STYLES-Work Sheet

School________________ Teacher________________ Observer________________ Date__________

Subject (Child's code name)________________________ Setting________________________________

SES f

1 ______
2 ______
3a ______
3b ______
4 ______
5a ______
5b ______
6a ______
6b ______
7a ______
7b ______
8a ______
6b ______
9a ______
9b ______
10 ______
11 ______
12 ______
13 ______
Σf ☐ ①

**STYLE A**
(Aggressive, manipulative)

c1 ______
c2 ______
c3b ______
c9b ______
Total A ______ ②
②x100/① = ☐ ③%
③/4 = ☐ ④
Visibility A

**STYLE B**
(Peer oriented, non-conforming, resistant)

c4 ______
c5b ______
c7b ______
c8b ______
Total B ______ ⑪
⑪ x100/① = ☐ ⑫ %
⑫ /25 = ☐ ⑬
Visibility B

**STYLE C**
(Withdrawn)

c12 ______
c13 ______
Total C ______ ⑧
⑧x100/① = ☐ ⑨%
⑨/5 = ☐ ⑩
Visibility C

**STYLE D**
(Peer dependent)

c6b ______
c11 ______
Total D ______ ⑤
⑤x100/① = ☐ ⑥%
⑥/20 = ☐ ⑦
Visibility D

**STYLE E**
(Adult dependent)

c6a ______
c7a ______
c9a ______
Total E ______ ⑭
⑭ x100/① = ☐ ⑮ %
⑮ /20 = ☐ ⑯
Visibility E

**STYLE F**
(Social, productive)

c3a ______
c8a ______
Total F ______ ⑰
⑰ x100/① = ☐ ⑱ %
⑱ /20 = ☐ ⑲
Visibility F

**Overall Coefficient**

(Range = 1 to 10)

%A______ x4=__________
%B______ x3=__________
%C______ x1=__________
%D______ x2=__________
%E______ x7=__________
%F______ x10=__________
%c5a______ x8=__________
%c10______ x5=__________
Σ______ Σ__________ /100 = Overall Coeff. ☐

**STYLE G** (Inner-directed, task-oriented)

c5a______x 100/① = ☐ ⑳ %
⑳ /35 = ☐ ㉑
Visibility G

**STYLE H** (Other-directed, task-oriented)

c10______x 100/① = ☐ ㉒ %
㉒ /30 = ☐ ㉓
Visibility H

## CASES Classifications

## D I.U WORKSHEET

Pupil: ____________

Setting: ____________

Step 2. Transfer tallies from Step 1 to their respective places in the following D.I.U. groupings.

| Desirable | Inappropriate | Unacceptable |
|---|---|---|
| 3a ________ | 5b ________ | 1 ________ |
| 5a ________ | 6b ________ | 2 ________ |
| 6a ________ | 7b ________ | 3b ________ |
| 7a ________ | 8b ________ | 4 ________ |
| 8a ________ | 9b ________ | |
| 9a ________ | 11 ________ | |
| 10 ________ | 12 ________ | |
| | 13 ________ | |
| Total ________<br>(sum D) | Total ________<br>(sum I) | Total ________<br>(sum U) |

Step 3. Use the following formulae to compute the percent of time in each of D., I., and U.:

%D = (sum D x 100)/(sum F)* = ________ (visible at 80%)

= ________ / _____ = ________

%I = (sum I x 100)/(sum F) = ________ (visible at 10-15%)

= ________ / _____ = ________

%U = (sum U x 100)/(sum F) = ________ (visible at 3%)

= ________ / _____ = ________

* sum F = total number of tallies for all 19 categories in a given observation period in a particular setting.

# APPENDIX C

## EXPANDED BROPHY-GOOD TEACHER-PUPIL DYADIC INTERACTION CLASSROOM OBSERVATION SYSTEM (DICOS)

1. Summary of Categories
2. Definitions of Additional Categories

# DICOS

## Section I

## Summary of Categories in the Expanded Brophy-Good Teacher-Pupil Dyadic Interaction Classroom Observation System

The major aspects of classroom life coded by this system are represented by the four cells in the diagram appearing below. Within each cell are the sub-categories of those four aspects which are then further broken down into still smaller units.

| | Public response opportunities | Private dyadic teacher-pupil contacts |
|---|---|---|
| Teacher afforded | A. | C.<br>I. Work-related<br>II. Personal<br>III. Procedure-related<br>IV. Behavior-related<br>V. Don't know |
| Student initiated | B.<br>I. Student Initiated Questions<br>II. Student Initiated Comments | D.<br>I. Work-related<br>II. Personal-related<br>III. Don't know |

A. Teacher Afforded Response Opportunities

The three key aspects of this category of classroom event are:

(a) they are public interactions between the teacher and a child, intended to be monitored by the class or group with which the teacher is working;

(b) they occur when the teacher asks a question requiring either a verbal or nonverbal response;

(c) only one child makes the response.

For each response opportunity that is coded, information has to be checked off in each of four subcategories: (1) type of response opportunity; (2) level of question asked; (3) quality of child's answer; (4) nature of the teacher's feedback reaction.

(1) Types of response opportunity

| | |
|---|---|
| Predesignated (PRE): | teacher names the child first and then asks a question; |
| Non volunteer (N. VOL): | teacher asks a question first but calls for a response from a child who has not raised his hand; |
| Volunteer (VOL): | teacher asks a question first and invites a response from a child with hand raised; |
| Called out (CALL): | teacher asks a question but a child calls out the answer before the teacher has a chance to select a respondent; the teacher nevertheless responds to the child who called out the answer. |

(2) Level of question asked

| | |
|---|---|
| Process (PCSS): | question requiring student to integrate facts or show knowledge of their relationships. |
| Product (PROD): | question for which a specific correct answer is sought. |
| Choice (CHOIS): | question requiring an answer to be selected from one of the alternatives presented. |
| Self Reference (SELF REF): | question requiring child to make a non-academic contribution to the classroom discussion. This type of question has then to be further classified as subject-matter related (SUB) or non subject-matter related (NON SUB) and then whether it requires the child to show a preference (PREF) or to give information about his past experience (EXP). |
| Opinion: | question requiring student to take a position on an issue or to predict the outcome of an experiment or hypothetical situation. If the child gives no response (NR) this is coded. On the other hand if the child does respond, the teacher's reaction to |

the answer is coded: if it is praised (+̄), criticized (-̄), ignored (0), accepted (ACPT), integrated (INTEG) into the ongoing discussion, or if the teacher disagrees (DISAG) with the child's opinion.

(3) Quality of child's answer

The child's answer is coded as correct (+), partially correct (±), incorrect (-), or no response (NR) but, if the child indicates that he doesn't know, this item of information is also coded.

(4) Nature of the teacher's feedback response.[1]

The teacher's reaction to the child's response has been categorized as terminal or sustaining. Reaction which is terminal, that is, it has the effect of terminating the interaction with the child, could be one of seven types. The teacher may praise (+̄), criticize (-̄), provide no response (NR), give process feedback (PCSS), give the correct answer (GIV ANS), ask another (ASK OTH) child for the answer, or the answer may be called out (CALL) by another student. Reaction which is sustaining, that is, it has the effect of prolonging the interaction, could be one of three kinds. The teacher may repeat the question (REPT Q), rephrase the question or give a clue (REP or CLU), or ask a new question (NEW Q).

B. Student Initiated Response Opportunities

1. Student Initiated Questions

This category of response opportunity is used if the student asks the teacher a question regarding the subject matter under discussion or some other matter. If the student calls out (CALL) the question without prior teacher approval, this point is coded and also if the question is relevant (REL) or irrelevant (IRREL). Two kinds of teacher reaction to the question, praise (+̄) and criticism (-̄), are coded if they occur, and also types of teacher feedback. The teacher may provide no feedback (0) (i.e. ignore the question), delay (DELAY) her answer, not accept (NACPT) it into the discussion, provide a brief or long answer or she may redirect (RDRCT) the question to another student. Three other categories praise (‡), criticism (-), and warning (WARN) are provided if the teacher makes a reaction related to the student's behavior in initiating the question.

---

[1] Modifications to the subcategories of teacher feedback as defined in the Expanded Brophy-Good System were made and are reported in Appendix B, Section II, page 204.

#### II. Student Initiated Comments

The details surrounding a student initiated comment that are coded are very similar to those for a student initiated question. All but three teacher response categories, brief, long, and redirect (RDRCT) are retained. They are replaced by another three. The teacher may accept (ACPT) the student comment, integrate (INTEG) it into the class discussion, or may use it to shift the direction of the class discussion.

### C. Teacher Afforded Dyadic Contacts

#### I. Teacher Afforded Contacts (Work-related)

These are instances when the teacher makes private contact with an individual child about his work. Several features of these contacts are coded. The contact may be long, brief or it may be one in which the teacher just observes (OBSV) without entering into verbal interaction. If the contact is a long or brief one, praise (‡) or criticism (-) is coded also if the teacher's comments include such reactions. A don't know (?) category is used if the interaction between teacher and child is not audible to the coder.

#### II. Teacher Afforded Contacts (Personal)

These contacts do not involve either work content or procedure but are of a strictly personal nature.

#### III. Teacher Afforded Contacts (Procedure-related)

Within this category a distinction is made between those instances when a teacher seeks a favor (child helps in running the classroom) and those in which the request have to do with getting the child ready to work. The latter are coded as management (MANAG). Thank you (THANKS) is coded if the teacher thanks the child following the management or favor request.

#### IV. Teacher Afforded Contacts (Behavior-related)

This category is used whenever the teacher makes some comment on the child's classroom behavior. They are subdivided into praise (‡), non-verbal intervention (NVI), warnings (WARN), and criticism (-). Errors which the teacher makes when warning a child are also noted. Three kinds of errors, target errors (TARG), timing errors (TIM), and overreactions (OVERT) are coded. The no error category is used whenever the teacher does not make one of the three errors. Provision also exists for the coder to record his uncertainty (?) if he is not sure that an error has occurred.

V. Don't know (?) is coded if the teacher-pupil communication is inaudible to the coder and the coder is unable to determine which of the above four types of teacher afforded contacts is occurring.

D. Student Initiated Dyadic Teacher-Pupil Contacts
(referred to as Child Created Contacts on the coding sheets)

I. Child Created Contacts (Work-related)

This type of contact may relate to work content (CONT) or work procedures (PROC). The teacher's feedback to the child is also coded, whether the teacher offers praise (‡) or criticism (=) and whether the contact is brief, long, or delayed (DELAY) by the teacher.

II. Child Created Contacts (Personal-related)

In this category there are two first-order divisions, experience (EXP) sharing and procedural (PROC). All experience sharing contacts are personal ones in which the student contacts the teacher to tell him something which is not related to either classroom work or procedure. The teacher's response is coded as either acknowledged (ACK) (i.e. the contact is acknowledged by the teacher) or delay (i.e. the teacher indicates she is unable to listen or talk to the pupil at that time).

A procedural contact occurs when the pupil is making a request, offers to do an errand, or reminds the teacher of something. The teacher's reaction is coded as grant or non-grant (N GRANT) (teacher has or has not granted the request) or as delay.

III. Don't Know

If the communication in the child created contact is inaudible to the coder, the don't know (?) column is used.

## Section II

## Definitions of One Modified Category and Two New Categories in the Expanded Brophy-Good Teacher-Pupil Dyadic Interaction Classroom Observation System

### No Feedback Reaction (0)

This category of terminal teacher feedback in the Brophy-Good system has been restricted in meaning in this study. This part of the original statement now embodies its full meaning.

> "If the teacher makes no response whatsoever following the child's answer to the question, he is coded for no feedback reaction (0). This means that he makes no verbal response to the child and does not communicate affirmation or negation by shaking his head in response to the answer. Instead, he merely moves on to something else, perhaps by starting to make a new point or by asking another child a question. Most coders will be surprised to find that this category is used much more often than they had expected. It frequently happens that the teacher makes no feedback reaction at all to the child's answer, especially in fast moving question drills where he is pushing to get correct answers in an impersonal fashion, without paying attention to the individual child giving the answer" (Brophy & Good, 1970, p. 17).

### Affirmative Teacher Reaction (AFFIRM)

This category of teacher reaction within an academic response opportunity is defined as a terminal teacher reaction which does not go beyond the level of simple affirmation. The teacher simply indicates that the child has given a correct response. He does not communicate a warm personal reaction to the child. There is merely an impersonal communication of information. For example, the teacher repeats the student's answer or thanks the pupil without explicit or implicit praise. The teacher's intent is to terminate student involvement.

### Repeats Student Statement (REP SS)

This is an additional category in the set of teacher reactions in academic response opportunities described as sustaining. In this category are to be coded all those instances when the teacher repeats the child's answer in a quizzical manner without indicating whether he considers it to be correct or incorrect, or when the teacher restates the pupil answer for the purpose of having the student confirm what he had just said. The principal criterion to be used in distinguishing a Repeats Student Statement is whether the teacher's intention was to sustain the student's involvement by having the pupil clarify for himself and/or for others the meaning of his previous response.

# APPENDIX D

## SHADOW STUDY AND MAPPING OF CLASSROOM MOVEMENTS

1. Shadow Study
2. Mapping Classroom Movements

## Shadow Study

### Instructions for Observers

1. Shadow Studies will be conducted with one acceptable* randomly selected pupil from each class.

2. The subject pupil is to be selected on the day of the Shadow Study, with no indication to the teacher or the pupils (including the subject pupil) of the selection.

3. The shadower will be in class prior to school commencement in order to capture as much behaviour as possible from as early in the day as conveniently possible.

4. Use the booklet and format provided in order to record the subject's movement, behaviour, and observer comments.

5. Note that recordings should be made throughout the day, for the whole day, including recesses, but excluding lunch break if the child leaves the school building for lunch.

6. Immediately at the end of school dismissal signal, approach the subject for interview. (See separate instructions concerning subject-interviews.)

7. Although it is necessary to record the subject's behaviour exactly every 10th minute, it is also helpful to note the time and circumstance of any 'unusual', atypical, or otherwise noteworthy behaviour on the part of the subject. Such behaviour should be pursued during the subject-interview.

8. Notes are to be made on observations of:

   (a) Behaviour -- the observable, overt pupil behaviour includes:

   - movements in seat
   - travelling about the room/school/playground/etc.
   - gestures and mannerisms
   - facial expressions
   - verbalization (initiating, responding, commenting, talking to self)
   - posture while sitting, standing, walking
   - relationship of subject to others -- role assumed by subject
   - response of subject to various situations -- skill, degree of achievement
   - interaction of subject with aspects of the environment

---

*"acceptable" implies that neither parent nor teacher has raised objections to the child being a subject for Shadow Study.

(b) Environment -- the place and circumstances of the pupil behaviour includes:

- the physical space -- room, gym, playground, etc.
- subject area -- math, reading, etc.
- teacher's directions or implied expectancies which structure the situation
- general social atmosphere or behaviour of other pupils at the time an observation is recorded
- ambient conditions (temperature, humidity) that may have significance

(c) Inferences -- the Observer may infer from the observed pupil behaviour:

- comments on the moods and emotions characteristic of the subject
- intent of observed behaviours
- status of subject in social settings
- feelings, emotions or attitudes aroused in Observer

9. Following the subject-interview the Observer will write a Summary. The Summary should give the Observer's opinion of how the subject perceived the day at school, what the subject's emotions and various states of mind were throughout the day. The Summary should also include the Observer's own impressions, opinions, and perceptions of the day -- an evaluation of how successful, enjoyable and so on he considered the day to be from his perspective as an educator-observer.

## Mapping Classroom Movements

### Instructions for Observers

1. Mapping of classroom movements is to accompany Shadow Studies. The purpose and technique of mapping is similar to that of time-sampling photography. Every 10 minutes throughout the day the Observer should record the location of every person in the classroom and note the general classroom events at that time.

2. Maps of the classrooms will be prepared, duplicated and supplied. Coding directions are included with the maps. Locations of persons should be noted midway between Shadow Study time samples. Having noted the locations of the map, the observer should then write a brief description of the classroom happenings under the Narrative Account heading.

3. The Narrative Account should make specific reference to:

   (a) the activity, verbal directions of the teacher

   (b) general activities of the pupils

   (c) activities where pupils interact with "things" within the classroom environment (name the things, state the context)

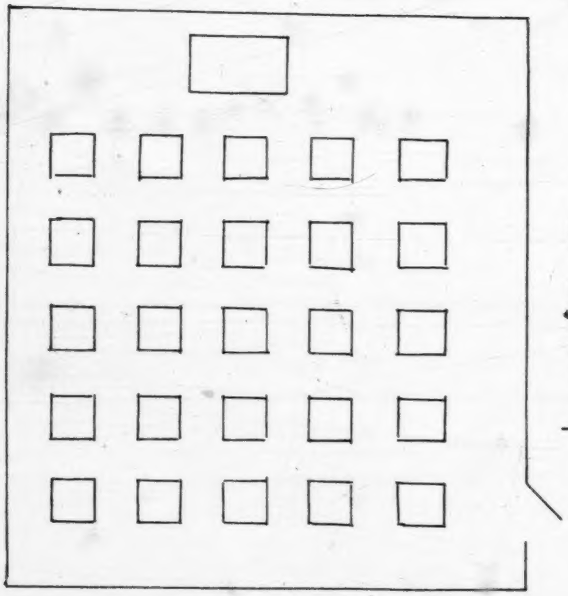
   (d) general behaviour patterns of the teacher or groups of pupils (especially teacher-pupil interactions)

   (e) factors or events external to the classroom which apparently affect activities and behaviours within the classroom

4. The Mapping Study may help you in formulating and writing up your end-of-day summary. The Shadow Study and Mapping Study combined should provide a fairly comprehensive picture of classroom life for one day for at least one child.

OBSERVATION # ______ SUBJECT ID _____ DATE ______ OBSERVER __________

NARRATIVE ACCOUNT OF BEHAVIOUR SETTING:



TIME ☐
(every 10th minute)

MAP KEY

t = teacher
s = subject
x = pupil
$\boxed{x}$ = pupil in desk
$\overline{x}$ = pupil standing
$\lfloor\underline{x}$ = pupil sitting on floor
←x = pupil walking
$\underline{x}$ = pupil lying on floor
v = visitor to room
o = observer
−x = pupil kneeling on floor

SPECIMEN DESCRIPTION OF PUPIL BEHAVIOUR: TIME ☐ (60 secs)
(every 10th minute)

# APPENDIX E

# PUPIL INTERVIEW PROTOCOLS

# PUPIL INTERVIEW PROTOCOLS

The pupil interview will be conducted with the child randomly selected for the Shadow Study (see Appendix D). The underlying purpose of the interview is to have the child explain his/her overt behaviour. We should like to learn about the moods, thoughts, and attitudes which guided the subject's behaviour throughout the Shadow Study day.

"The interview is a technique particularly well adapted to uncovering subjective definitions of experiences, to assessing a child's perceptions of the significant people and events in his environment, and to studying how he conceptualizes his life expectancies" (Yarrow, 1960). This will be an information-gathering interview in the sense that it will not be a therapeutic or a fact-giving session. The interview will provide supplemental data for the individual pupil case studies.

The following notes are provided to guide you in your approach to the interview. The notes are followed by specific questions, which must be brought into the interviews, and suggestions for phrasing and probing.

1. The interviewer should direct his attention to understanding the subject. In particular, the interviewer will try to discover how the child has felt and thought throughout the school day. The interviewer should formulate questions based on his Shadow Study observations in order to guide him during the interview.

2. The nature of the interview should be free and non-directive, allowing the interviewer scope to pose questions and probe for answers in a way which seems appropriate to him at the time.

3. Not excepting item #2 above, the questions to be detailed later should be incorporated into the interview, and subject responses

should be obtained using a tape recorder.

4. Immediately at the end of the Shadow Study day, ask the subject to stay and chat with you for a while. At this point let the teacher know who your subject is, and let it be obvious to the child that your conversation is being planned with the teacher's knowledge and approval. Ask the subject, in the teacher's presence, if you should telephone his home. (In any event, call parents in grades one and three). Retire with the subject to a quiet place, home classroom, nurse's or counsellor's office, where you may talk without interruption.

5. Set up the tape recorder, with the subject's knowledge and permission. Tape the whole interview. Remember, we already have parental permission for such procedures. Early in the interview explain the purpose of the interview ("I am interested in finding out what boys and girls of your age think about school. I should like you to answer some questions and tell me about school, and I'll put the tape recorder on in case I forget things you tell me.") Assure the subject of confidentiality, and say that you will take no longer than 25 minutes (grades three and six) or 20 minutes (grade one).

6. Shadowing and interviews should not be conducted until the end of the collection of classroom observation data. You must have opportunity to build a rapport with your children -- your relationship with the subject should be warm, empathic, sensitive -- earn the right to ask questions and to expect honest answers.

7. Early questions should be off-school and easy to answer, e.g., "How old are you, Jimmy?" Early questions should also be general in nature, e.g., "What do you like most about school?" Later questions can be more specific, e.g., "What was Mr. Bloggs teaching you in Math

today? How do you change fractions to decimals?" And later still, the questions may be more frank, e.g., "What do you think about when you're making spitballs to use in English?"

8. In closing the interview, be sure that you have not aroused anxieties which are continuing. Repeat reassurances concerning confidentiality. You will help this matter if throughout the interview you have managed to be non-judgemental, accepting of the child's attitudes and feelings without criticism or threat, and accepting the subject's answers or information without indicating your own feelings.

9. During the interview observe and note the subject's non-verbal behaviour -- feet, fingers, jaw, posture, reactions to specific questions.

10. The interviewer must try to draw information from the subject: this sometimes means making a personal contribution to the discussion. But try not to talk too much or for too long. Use open-ended questions, e.g., "Tell me about . . ." "Could you explain . . .?" "I don't understand . . . Could you help me?" "Some children think that . . . Other children think that . . . What do you think?"

11. Upon completion of the interview, write your own summary of the day's experiences (refer to the Shadow Study instructions). Try to interpret the interview in light of your own biases and the possible reactive effects you had on the subject's responses.

12. Please return tapes, interview booklets and Shadow Study summaries to Pete.

The following questions should help guide the structure of the interview, although the nature of the open-ended interview is to encourage the interviewer to probe the subject for full responses, and to pursue important lines of inquiry as they arise during the interview.

Question 1. "Tell me all the things you did in school after recess this afternoon."

The intent of this question is to have the pupil recall the most recent happenings as a lead into questions concerning the child's perceptions, intents, attitudes, and moods.

Phrasing: It may be necessary to lead the child into his response by saying, "Let's see, you went out of the room and onto the field for recess. Then the bell went and you came into school and into the room. What did you do once you got into the room?"

Probing: Encourage the child to expand on specific aspects of behaviour: "What happened when ...?" "Why do you think you ...?" "Tell me more about ... "

Question 2. "What did you do during recess this afternoon?"

The intent of this question is to examine aspects of the child's behaviour in non-structured situations.

Probing: "Do you usually stay alone during recess?" "Whom do you usually play with?" "What other games do you play?" "Why did you play ... today?" "How come you played with ... today?"

Question 3. This and subsequent questions may follow the format of Question 1 in order "to cover the ground" of the school day. But, the following questions must be asked.

Question 4. "Tell me all the things that you can do in your classroom." The intent is to know the range of activities the child perceives as being available to him/herself in the classroom. Also sets up a lead to ask the child for explanation of an activity witnessed by the observer which may or may not be teacher-sanctioned.

Phrasing: Perhaps begin this question with, "During ... I saw you doing ... Is this something your teacher allows you to do? What other things does your teacher allow?"

Probing: Repeating the question stressing can may help to bring out the range of possible activities. It may also help to ask a specific question for a simple "Yes" or "No" answer to test the range of possible activities. Probe further with "And what else can you do?" and, "What do you mean by ... (work)?"

Question 5. "Who are the three boys and girls in your class you most like to sit near?"
This question should be repeated three more times, replacing the phrase in italics with most like to work with, most like to play with, and mostly play with. The answers to these questions will be checked with the subject's response on the sociometric questionnaire and should enable the interviewer to ask further clarifying questions concerning his observations throughout the day. The purpose is to gather information on the nature of the child's interaction with his teacher and classmates.

Phrasing: No changes necessary.

Probing: Once the child has identified his professed peer contacts, the interviewer might mention other pupils that the child has interacted with and ask how he feels about these people, e.g., "Do you like to tell ... what to do?" "Do you like to argue or fight with ...?" "Do you like to not let ... tell you what to do?" to let ... tell you what to do? to help ...? to ask ... for help? to have nothing to do with ...?"

Question 6. "What do you like about your classroom and the things in it?" The intent is to discover the subject's knowledge of the "things of learning" in the room and his general attitude towards the classroom environment.

Phrasing: It may be necessary to be more specific concerning what is meant by "things" without leading the subject. Mention "pictures", "boys", (grade 1), "games and puzzles".

Probing: Ask "Who brings the things into class?" (teacher or pupils), how often are different things brought in and displayed? Particularly probe the child's own involvement with things as observed by the interviewer while shadowing, e.g., does the subject use classroom objects because using them is fun, because they help him learn things, because they help him do his work, or ...?

Question 7. "Tell me about ..." or, "How do you change fractions to decimals?"
The intent of the question(s) is to gain some idea of the child's understanding of lessons experienced during the day. In particular, the interviewer should check on lessons where the subject's overt behaviour did not seem to be focused on the lesson material.

Phrasing: Do not try to "trick" the child. The questions should be perfectly fair and legitimate in terms of what he could or should have learned from the day's lessons. Phrasing may be adapted from that used in the lessons.

Probing: Necessary only in terms of verifying or checking on the interviewer's observations of the child's behaviour.

Question 8. "Suppose tomorrow someone told you that you need never come to school again, would you still come? Why?"

The intent of the question is to find out how the child feels about school.

Phrasing: It may be necessary to repeat the question with emphasis on never followed by ever.

Probing: What does the subject like or dislike about school? What in school makes the subject annoyed, bored, frustrated, unhappy, excited, happy?

# APPENDIX F

# HIGH INFERENCE RATING SCALES

# High Inference Rating Scales

## Withitness

1. The teacher makes frequent errors in attempting to deal with deviant behavior. She may over react to a situation, may react late or not at all (*timing*), may be off target in her reprimands and/or may desist a less serious deviancy while overlooking a more serious deviancy.

2. Between 1 and 3.

3. The teacher sometimes makes errors in attempting to deal with deviant behavior, i.e., *over react, timing, target and minor-major deviancy*, and sometimes makes no errors in desist attempts.

4. Between 3 and 5.

5. The teacher makes few of the above errors in attempting to deal with deviant behavior.

## Overlappingness

1. The teacher almost always attends to only *one* issue at a time. She either remains immersed in one issue or drops it and goes *all out* for another. For example, the teacher, while working with one group, ignores deviant behavior in another group, or ignores intruding children from another group, or goes all out and becomes immersed in the deviance or intrusion.

2. Between 1 and 3.

3. The teacher sometimes attends to more than one issue at a time.

4. Between 3 and 5.

5. The teacher almost always attends to more than one issue at a time. She, while working with one group, is able to deal with deviance and intrusions, verbally and nonverbally.

## Smoothness

1. The teacher frequently acts in a manner which interferes with the ongoing *flow* of *academic* events. Actions of the teacher are not goal-oriented. She may pay attention to irrelevant or undue attention to intrusive details (*stimulus-boundedness*). She may *burst in* on children's activities with an order, statement or question (*thrusts*). She may shift back and forth from one activity to another and back again leaving things *hanging in mid-air (dangles and truncations)*.

2. Between 1 and 3.

3. The teacher sometimes acts in a manner which interferes with the ongoing *flow* of *academic* events. Actions of the teacher are sometimes goal-oriented and sometimes are not, i.e., some *stimulus-boundedness, thrusts, dangles and truncations* are evident.

4. Between 3 and 5.

5. The teacher rarely exhibits the above interfering behaviors.

## Momentum

1. Teacher behaviors frequently *slow down* the pace of the lesson inappropriately. This is done by *overdwelling* on pupil behavior, a subpoint rather than a main point, physical props rather than substance, and on instructions or details to the point of boredom. It is also slowed down by *fragmentation,* i.e., dealing with pupils one at a time when it is appropriate and more efficient to deal with them as a group, or dealing with props one at a time rather than en masse.

2. Between 1 and 3.

3. Teacher behaviors sometimes *slow down* the pace of the lesson by *overdwelling* and *fragmentation*.

4. Between 3 and 5.

5. Teacher behaviors rarely *slow down* the pace of the lesson by *overdwelling* or *fragmentation*.

## Clarity

1. The teacher, when giving instructions, answering questions or explaining material to the class, is unclear in her presentations. The presentations may be too complex, ambiguous, or make use of unfamiliar or unrelated concepts and terms. Answers given are not specific but are vague or evasive. The teacher uses qualifiers (e.g. maybe, sometimes, it could be, etc.) excessively. The teacher rarely gives appropriate examples, uses illustrations, states objectives, summarizes, or checks for student understanding.

2. Between 1 and 3.

3. The teacher when giving instructions, answering questions or explaining material to the class, is sometimes clear and sometimes unclear in her presentations.

4. Between 3 and 5.

5. The teacher when giving instructions, answering questions or explaining material to the class, is clear in her presentation. Adequate use of examples and illustrations are made, objectives are clearly stated, main points are summarized, and adequate checks of student understanding are made.

## Persuasiveness (Teacher's Ability to Motivate)

1. The teacher is the kind of person that communicates a socially weak and uninfluential person. She is frequently unable to get students to do work related to the objectives of the lesson.

2. Between 1 and 3.

3. The teacher is the kind of person that communicates an average persuasively powerful person. She is sometimes able to motivate students to work and sometimes unable to do so.

4. Between 3 and 5.

5. The teacher is the kind of person that communicates a socially influential or persuasively powerful person. She is almost always able to get students to do the work related to the objectives of the lesson.

   NOTE: This level does not imply that the teacher has chosen all the *goals* or *objectives* for the student.

## Warmth[1]

1. The teacher gives *explicit* evidence of *rejection* of the student, his ideas, experiences, opinions or feelings. Criticism is harsh and gives *explicit* evidence of a negative feeling for the student expressed by the teacher.

2. The teacher is mechanical and/or passive in her responses. Mild criticism, a lack of concern or ignoring, provide implicit evidence of disinterest in the student.

3. The teacher provides no explicit or implicit evidence of dislike or rejection of the student. She does not criticize nor is there a clear expression of warmth, i.e. there is interest shown but not warmth.

4. The teacher *accepts, allows* pupil ideas, experiences, opinions, and feelings. There is implicit evidence of warmth and respect through praise and encouragement.

5. The teacher gives *explicit* evidence of a deep caring, prizing, and valuing of the student, and this is made clear to the student. Expectations of the student's highest and best is pressed for, indicating a deep respect. Voice tone and manner give evidence of a close relationship.

[1] Adapted from scales authored by C. B. Truax.

## Empathy[1]

1. The verbal and behavioral expressions of the first person either do not attend to, or detract significantly from, the verbal and behavioral expressions of the second person in that they communicate significantly less of the second person's feelings than the second person has communicated himself.

2. While the first person responds to the expressed feelings of the second person, he does so in such a way that he subtracts noticeable affect from the communications of the second person.

3. The expressions of the first person in response to the expressed feelings of the second person are essentially interchangeable with those of the second person in that they express essentially the same affect and meaning.

4. The responses of the first person add noticeably to the expressions of the second person in such a way as to express himself.

5. The first person's responses add significantly to the feeling and meaning of the expressions of the second person in such a way as to (1) accurately express feeling levels below what the person himself was able to express or (2) in the event of ongoing deep self-exploration on the second person's part, to be fully with him in his deepest moments.

[1] Carkhuff Revisions of the Truax Scales.

# APPENDIX G

## THIS I BELIEVE TEST (TIBT)

1. Descriptions of Belief Systems
2. Descriptions of Auxiliary Dimensions

# TIBT

## Description of Belief Systems (This I Believe Test)

### System 1

Characterized, according to theoretical notions, by a strong need for structure; rigid adherence to rules, authorities, and values which provide structure; and rejection of environmental inputs which are dissonant with the individual's organized modes of interpretation.

TIB responses tend to be stated in a definite, hard-and-fast manner, showing little doubt in the subject's mind about how he feels. The content shows adherence to norms and practices approved by society or prestige authorities, a negative reaction to rule-breaking, and polarized evaluations. Heavy reliance on authority is demonstrated by highly favorable attitudes toward religion, law, parents, friends. Other people must meet rigid standards of acceptability, operating in terms of the general behavioral principles of the subject. Religion is a highly consistent concern, serving as a base for the belief system in all aspects of life in many cases. This referent tends to elicit the most clear-cut System 1 responses of all the referents.

System 1's often demonstrate strong ingroup-outgroup feelings, expressed by intense hostility and negative feelings on the content of some referents. In order to avoid confusion with System 2 responses that appear similar because of their negativity, it is necessary to evaluate such responses within the total context of all the responses.

The overall impression of System 1's is that of a person who has definite stands on every topic, states them evaluatively and unequivocally, and rejects things if they do not meet his high standards or ideals of perfection. The reader may feel that this subject is rather hostile toward his environment and other people, but there is an underlying sense of stable acceptance of things as they should (ought, must, etc.) be by his standards. The words, "everything", "all", "completely", "best", "worst", etc., are all words that indicate the extreme, clear-cut, definite aspects of existence as this person sees it. Uncertainty is anathema to a System 1, and both content and structure in his responses demonstrate his drive to reject uncertainty and to find and maintain certainty in his environment.

### System 2

Characterized by terms highly similar to those of System 1 except for a reversal of certain central aspects of content. The structural aspects are similar, and the responses indicate rigidity, simplicity, consistency and exclusivity.

This subject has the same drive for certainty as the System 1, but seems unable to rely on his world to find it. Hence, he seems to obtain certainty by rejecting his world, as though negating it provides his only source of certainty. The reader will find a rejection of or hostile attitude toward authority referents, idealistic notions, most American standards and values, and most other people. Not all people are rejected, however, since this subject makes positive statements about the underdog, the loner, minority groups and individuality. Conversely, he makes negative statements about elements that might do harm to these people and attributes.

There is a strong rejection of religion, people, government, and, more subtly, ties and obligations and other freedom-restraining devices. This subject reacts negatively to these ideas, yet cannot ignore them. He speaks of the importance of close friendship, but suspects most people who seem to offer it. He tends to be factual and hard-nosed rather than idealistic about the world, requiring a need for structure similar to that observed in the System 1 person.

Overall, the System 2 person appears extremely hostile and rejecting, concrete-minded, non-analytic toward his environment, and a categorical acceptor or rejector in terms of pre-established negativity. His responses may be quite novel, but often they are inappropriately so and thus turn out to be more clever than creative.

## System 3

The chief locus of satisfaction for a System 3 tends to be his relation with other people. His responses reflect the central importance of people, and he accepts and voices the values of the people with whom he is in contact at the moment rather than initiating behaviors or expressing beliefs that are contrary to the present group.

TIB responses generally lack any expression of negative feelings. There is a strong tendency to deal with the world through its superficial aspect, expressed in the use of clichés rather than directly. Relationships with people are brought in to the answers even when TIB referents do not necessarily call for them. Generally, the only negative reaction will be to a referent indicating harm or injury to other people.

The responses of these subjects are more complex, varied and abstract than Systems 1 and 2. These people are typically rather sophisticated in dealing with their world and do not demonstrate a hard-and-fast rigidity in responses to the referents. Though the repeated emphasis on interpersonal relations may at first appear to be a rigid response tendency, analysis shows a great deal of flexibility and openness in the System 3's responses, while remaining sensitive to the evidence of person-oriented content. These individuals tend to manifest many distinctions in their thinking, but most of these are based on the "in-thing" and show little integration or synthesis.

The overall impression generated by the responses of System 3 persons is one of a positive attitude toward situations and ideals which are beneficial to people.

## *System 4*

Characterized by relative independence from the environment, greater reliability on internally-derived stimulation, greater flexibility and openness, interest in (even seeking for) novelty, a relative lack of extreme evaluativeness or extreme acceptance-rejection behavior, the tendency to be aware of and to respond to referents in terms of multiple alternatives or interpretations.

TIB responses show a juxtaposition of diverse, often contrasting elements. There is a lack of one-way evaluativeness; certainty and definiteness in commitment to a single way of perceiving a situation are typically not evident in these subjects.

The overall impression of a System 4 person is one of complexity of thought and feeling. Depth of connotative implications rather than superficial statement is most typical of these *Ss*. They tend to show novelty *and* appropriateness and to synthesize the many differentiations they make.

## Description of Auxiliary Dimensions (This I Believe Test)

1. Openness - by which is meant the respondents' presumed willingness to seriously entertain and possibly accept an idea contrary to his own more central ones.
2. Candor - by which is meant the assumed forthrightness of self-honesty with which a response is made, which implies low denial and low defensiveness.
3. Evaluativeness - which refers to the tendency to make evaluative, good-bad, right-wrong judgements, with obviously pejorative implications.
4. Externality - which refers to the respondents' tendency to attribute success, failure, or control of his actions to forces over which he has little or no control, including such things as luck, other persons, God, social obstacles, etc.
5. Cynicism - which indicates an expression of nihilism, that nothing matters anyway, and, in general, that the world is a bunch of crap.
6. Optimism - which refers to an assumed feeling of well-being and, in general, that things either have turned out or will turn out well for him/her.
7. Complexity - which has to do with the number of different themes expressed together with their integration, which, in essence, equals a kind of judged profundity or depth of thought.

# APPENDIX H

## SIXTEEN PERSONALITY FACTOR QUESTIONNAIRE (16 PF)

1. Capsule Descriptions of the 16 Primary Personality Factors

2. Capsule Descriptions of the Four Second-Order Factors

## 16 PF

## Capsule Descriptions of the Sixteen Primary Personality Factors

### Factor A: Reserved vs. Outgoing

The person who scores low (sten of 1 to 3) on Factor A tends to be stiff, cool, skeptical, and aloof. He likes things rather than people, working alone, and avoiding compromises of viewpoints. He is likely to be precise and "rigid" in his way of doing things and in personal standards, and in many occupations these are desirable traits. He may tend, at times, to be critical, obstructive, or hard.

The person who scores high (sten of 8 to 10) on Factor A tends to be goodnatured, easy-going, emotionally expressive (hence naturally Affectothymia), ready to cooperate, attentive to people, soft-hearted, kindly, adaptable. He likes occupations dealing with people and socially impressive situations. He readily forms active groups. He is generous in personal relations, less afraid of criticism, better able to remember names of people.

### Factor B: Less Intelligent vs. More Intelligent

The person scoring low on Factor B tends to be slow to learn and grasp, dull, given to concrete and literal interpretation. His dullness may be simply a reflection of low intelligence, or it may represent poor functioning due to psychopathology.

The person who scores high on Factor B tends to be quick to grasp ideas, a fast learner, intelligent. There is some correlation with level of culture, and some with alertness. High scores contraindicate deterioration of mental functions in pathological conditions.

### Factor C: Affected By Feelings vs. Emotionally Stable

The person who scores low on Factor C tends to be low in frustration tolerance for unsatisfactory conditions, changeable and plastic, evading necessary reality demands, neurotically fatigued, fretful, easily emotional and annoyed, active in dissatisfaction, having neurotic symptoms (phobias, sleep disturbances, psychosomatic complaints, etc.). Low Factor C score is common to almost all forms of neurotic and some psychotic disorders.

The person who scores high on Factor C tends to be emotionally mature, stable, realistic about life, unruffled, possessing ego strength, better able to maintain solid group morale. Sometimes he may be a person making a resigned adjustment* to unsolved emotional problems.

*Shrewd clinical observers have pointed out that a good C level sometimes enables a person to achieve effective adjustment despite an underlying psychotic potential.

Factor E: Humble vs. Assertive

The person who scores low on Factor E tends to give way to others, to be docile, and to conform. He is often dependent, confessing, anxious for obsessional correctness. This passivity is part of many neurotic syndromes.

The person who scores high on Factor E is assertive, self-assured, and independent-minded. He tends to be austere, a law to himself, hostile or extrapunitive, authoritarian (managing others), and disregards authority.

Factor F: Sober vs. Happy-go-lucky

The person who scores low on Factor F tends to be restrained, reticent, introspective. He is sometimes dour, pessimistic, unduly deliberate, and considered smug and primly correct by observers. He tends to be a sober, dependable person.

The person who scores high on this trait tends to be cheerful, active, talkative, frank, expressive, effervescent, care-free. He is frequently chosen as an elected leader. He may be implusive and mercurial.

Factor G: Expedient vs. Conscientious

The person who scores low on Factor G tends to be unsteady in purpose. He is often casual and lacking in effort for group undertakings and cultural demands. His freedom from group influence may lead to anti-social acts, but at times makes him more effective, while his refusal to be bound by rules causes him to have less somatic upset from stress.

The person who scores high on Factor G tends to be exacting in character, dominated by sense of duty, persevering, responsible, planful, "fills the unforgiving minute". He is usually conscientious and moralistic, and he prefers hard-working people to witty companions. The inner "categorical imperative" of this essential superego (in the psychoanalytic sense) should be distinguished from the superficially similar "social ideal self" of $Q_3+$.

Factor H: Shy vs. Venturesome

The person who scores low on this trait tends to be shy, withdrawing, cautious, retiring, a "wallflower". He usually has inferiority feelings. He tends to be slow and impeded in speech and in expressing himself, dislikes occupations with personal contacts, prefers one or two close friends to large groups, and is not given to keeping in contact with all that is going on around him.

The person who scores high on Factor H is sociable, bold, ready to try new things, spontaneous, and abundant in emotional response. His "thick-skinnedness" enables him to face wear and tear in dealing with people and grueling emotional situations, without fatigue. However, he can be careless of detail, ignore danger signals, and consume much time talking. He tends to be "pushy" and actively interested in the opposite sex.

Factor I: Tough-minded vs. Tender-minded

The person who scores low on Factor I tends to be practical, realistic, masculine, independent, responsible, but skeptical of subjective, cultural elaborations. He is sometimes unmoved, hard, cynical, smug. He tends to keep a group operating on a practical and realistic "no-nonsense" basis.

The person who scores high on Factor I tends to be tender-minded, day-dreaming, artistic, fastidious, feminine. He is sometimes demanding of attention and help, impatient, dependent, impractical. He dislikes crude people and rough occupations. He tends to slow up group performance, and to upset group morale by unrealistic fussiness.

Factor L: Trusting vs. Suspicious

The person who scores low on Factor L tends to be free of jealous tendencies, adaptable, cheerful, un-competitive, concerned about other people, a good team worker.

The person who scores high on Factor L tends to be mistrusting and doubtful. He is often involved in his own ego, is self-opinionated, and interested in internal, mental life. He is usually deliberate in his actions, unconcerned about other people, a poor team member.

Factor M: Practical vs. Imaginative

The person who scores low on Factor M tends to be anxious to do the right things, attentive to practical matters, and subject to the dictation of what is obviously possible. He is concerned over detail, able to keep his head in emergencies, but sometimes unimaginative.

The person who scores high on Factor M tends to be unconventional, unconcerned over everyday matters, Bohemian, self-motivated, imaginatively creative, concerned with "essentials", and oblivious of particular people and physical realities. His inner-directed interests sometimes lead to unrealistic situations accompanied by expressive outbursts. His individuality tends to cause him to be rejected in group activities.

**Factor N:** Forthright vs. Shrewd

The person who scores low on Factor N tends to be unsophisticated, sentimental, and simple. He is sometimes crude and awkward, but easily pleased and content with what comes, and is natural and spontaneous.

The person who scores high on Factor N tends to be polished, experienced, worldly, shrewd. He is often hardheaded and analytical. He has an intellectual, unsentimental approach to situations, and approach akin to cynicism.

**Factor O:** Placid vs. Apprehensive

The person who scores low on Factor O tends to be placid, with unshakable nerve. He has a mature, unanxious confidence in himself and his capacity to deal with things. He is resilient and secure, but to the point of being insensitive of when a group is not going along with him, so that he may evoke antipathies and distrust.

The person who scores high on Factor O tends to be depressed, moody, a worrier, full of foreboding, and brooding. He has a childlike tendency to anxiety in difficulties. He does not feel accepted in groups or free to participate. High Factor O score is very common in clinical groups of all types.

**Factor $Q_1$:** Conservative vs. Experimenting

The person who scores low on Factor $Q_1$ is confident in what he has been taught to believe, and accepts the "tried and true", despite inconsistencies, when something else might be better. He is cautious and compromising in regard to new ideas. Thus, he tends to oppose and postpone change, is inclined to go along with tradition, is more conservative in religion and politics, and tends not to be interested in analytical "intellectual" thought.

The person who scores high on Factor $Q_1$ tends to be interested in intellectual matters and has doubts on fundamental issues. He is skeptical and inquiring regarding ideas, either old or new. He tends to be more well informed, less inclined to moralize, more inclined to experiment in life generally, and more tolerant of inconvenience and change.

**Factor $Q_2$:** Group-dependent vs. Self-sufficient

The person who scores low on Factor $Q_2$ prefers to work and make decisions with other people, likes and depends on social approval and admiration. He tends to go along with the group and may be lacking in individual resolution. He is not necessarily gregarious by choice; rather he needs group support.

The person who scores high on Factor $Q_2$ is temperamentally independent, accustomed to going his own way, making decisions and taking action on his own. He discounts public opinion, but is not necessarily dominant in his relations with others (see Factor E). He does not dislike people but simply does not need their agreement or support.

## Factor $Q_3$: Undisciplined Self-conflict vs. Controlled

The person who scores low on Factor $Q_3$ will not be bothered with will control and regard for social demands. He is not overly considerate, careful, or painstaking. He may feel maladjusted, and many maladjustments (especially the affective, but not the paranoid) show $Q_3-$.

The person who scores high on Factor $Q_3$ tends to have strong control of his emotions and general behavior, is inclined to be socially aware and careful, and evidences what is commonly termed "self-respect" and regard to social reputation. He sometimes tends, however, to be obstinate. Effective leaders, and some paranoids, are high on $Q_3$.

## Factor $Q_4$: Relaxed vs. Tense

The person who scores low on Factor $Q_4$ tends to be sedate, relaxed, composed, and satisfied (not frustrated). In some situations, his oversatisfaction can lead to laziness and low performance, in the sense that low motivation produces little trial and error. Conversely, high tension level may disrupt school and work performance.

The person who scores high on Factor $Q_4$ tends to be tense, excitable, restless, fretful, impatient. He is often fatigued, but unable to remain inactive. In groups he takes a poor view of the degree of unity, orderliness, and leadership. His frustration represents an excess of stimulated, but undischarged, drive.

## Capsule Descriptions of Four Second-order Personality Factors

### Factor $Q_I$: Introversion vs. Extraversion

The person who scores low on Factor $Q_I$ tends to be shy, self-sufficient, and inhibited in interpersonal contacts. This can be either a favorable or unfavorable finding, depending upon the particular situation in which the person is expected to function; e.g., introversion is a favorable predictor of precision workmanship.

The person who scores high on this factor is a socially outgoing, uninhibited person, good at making and maintaining interpersonal contacts. This can be very favorable in situations that call for this type of temperament, e.g., salesmanship, but should not be considered necessarily favorable as a general predictor, e.g., of scholastic achievement.

### Factor $Q_{II}$: Low Anxiety vs. High Anxiety

The person who scores low on this factor tends to be one whose life is generally satisfying and one who is able to achieve those things that seem to him to be important. However, an extremely low score can mean lack of motivation for difficult tasks, as is generally shown in studies relating anxiety to achievement.

The person who score high on this factor is high on anxiety as it is commonly understood. He need not be neurotic, since anxiety could be situational, but it is probable that he has some maladjustment, i.e., he is dissatisfied with the degree to which he is able to meet the demands of life and to achieve what he desires. Very high anxiety is generally disruptive of performance, and productive of physical disturbances.

### Factor $Q_{III}$: Tenderminded Emotionality vs. Tough Poise

The person who scores low on Factor $Q_{III}$ is likely to be troubled by pervasive emotionality, and may be of a discouraged, frustrated type. He is, however, sensitive to the subtleties of life, likely to be artistic and rather gentle. If he has problems, they often involve too much thought and consideration before action is taken.

The person who scores high on this factor is likely to be an enterprising, decisive, and resilient personality. However, he is likely to miss the subtle relationships of life, and to orient his behavior too much toward the obvious. If he has difficulties, they are likely to involve rapid action with insuffcent consideration and thought.

## Factor $Q_{IV}$: Subduedness vs. Independence

The person who scores low on Factor $Q_{IV}$ is a group-dependent, chastened, passive personality. He is likely to desire and need support from other persons, and likely to orient his behavior toward persons who give such support.

The person who scores high on this factor tends to be an aggressive, independent, daring, incisive person. He will seek those situations where such behavior is at least tolerated and possibly rewarded, and is likely to exhibit considerable initiative.

# APPENDIX I

## TABLE OF TEACHER SCORES ON SELECTED MEASURES

1. Minnesota Teacher Attitude Inventory (MTAI)
2. High Inference Rating Scales (HIRS)
3. This I Believe Test (TIBT)
4. Expanded Brophy-Good Teacher-Pupil Dyadic Interaction Classroom Observation System (DICOS)
5. Sixteen Personality Factor Questionnaire (16 PF)

TABLE OF TEACHER SCORES ON SELECTED MEASURES

| Item measured | | Grade One | | Grade Three | | Grade Six | |
|---|---|---|---|---|---|---|---|
| | | Teacher A | Teacher D | Teacher B | Teacher E | Teacher C | Teacher F |
| 1. MTAI | | 73 | 86 | 76 | 74 | 74 | 88 |
| 2. HIRS | | | | | | | |
| Withitness | | 3.7 | 4.0 | 3.3 | 3.0 | 3.9 | 3.7 |
| Overlappingness | | 3.2 | 4.3 | 3.3 | 2.4 | 3.9 | 3.4 |
| Smoothness | | 3.7 | 4.4 | 3.3 | 3.1 | 3.9 | 3.5 |
| Momentum | | 3.7 | 4.2 | 3.2 | 2.8 | 4.4 | 3.2 |
| Clarity | | 3.9 | 4.3 | 3.4 | 2.9 | 3.5 | 3.3 |
| Persuasiveness | | 3.7 | 4.3 | 3.1 | 3.1 | 4.4 | 3.7 |
| Warmth | | 2.8 | 3.9 | 2.9 | 2.2 | 3.6 | 3.8 |
| Empathy | | 1.4 | 2.3 | 2.5 | 1.5 | 1.7 | 2.0 |
| 3. TIBT | | | | | | | |
| Belief System | | 1-4 | 1-4 | 4-3 | 1-4 | 1-2 | 1-2 |
| Auxiliary Dimension | | | | | | | |
| Openness | | 3 | 3 | 4 | 3 | 2 | 2 |
| Candor | | 3 | 3 | 5 | 4 | 3 | 3 |
| Evaluativeness | | 3 | 3 | 1 | 3 | 4 | 3 |
| Externality | | 3 | 2 | 1 | 1 | 2 | 1 |
| Cynicism | | 1 | 1 | 1 | 1 | 3 | 2 |
| Optimism | | 3 | 3 | 3 | 3 | 2 | 2 |
| Complexity | | 3 | 3 | 4 | 3.5 | 3 | 3 |
| 4. DICOS: Dyadic Interactions | | | | | | | |
| Language Arts | | | | | | | |
| Number of Lessons | | 10 | 8 | 8 | 10 | 10 | 6 |
| Public Interactions | | 156 | 407 | 159 | 638 | 307 | 408 |
| Private Interactions | | 892 | 709 | 582 | 319 | 430 | 226 |
| Mathematics | | | | | | | |
| Number of Lessons | | 3 | 2 | 4 | 3 | | |
| Public Interactions | | 21 | 63 | 140 | 150 | | |
| Private Interactions | | 332 | 186 | 145 | 181 | | |
| Totals | | | | | | | |
| Public | | 177 | 470 | 299 | 788 | 307 | 408 |
| Private | | 1224 | 1185 | 727 | 500 | 430 | 226 |
| Combined | | 1401 | 1655 | 1026 | 1288 | 737 | 634 |
| 5. 16 PF: Personality Factor | | | | | | | |
| Low Score Direction | High Score Direction | | | | | | |
| A.Reserved | Outgoing | 10 | 7 | 9 | 8 | 2 | 3 |
| B.Less intelligent | More intelligent | 5 | 7 | 7 | 5 | 7 | 10 |
| C.Less stable | More stable | 5 | 6 | 6 | 8 | 5 | 6 |
| E.Humble | Assertive | 8 | 1 | 6 | 7 | 3 | 9 |
| F.Sober | Happy-go-lucky | 4 | 2 | 9 | 9 | 4 | 4 |
| G.Expedient | Conscientious | 5 | 7 | 2 | 5 | 7 | 2 |
| H.Shy | Adventuresome | 4 | 5 | 9 | 6 | 2 | 7 |
| I.Tough minded | Tender minded | 9 | 9 | 7 | 9 | 10 | 7 |
| L.Trusting | Suspicious | 5 | 1 | 5 | 3 | 7 | 5 |
| M.Practical | Imaginative | 6 | 4 | 8 | 7 | 5 | 10 |
| N.Forthright | Shrewd | 6 | 10 | 2 | 3 | 8 | 3 |
| O.Placid | Apprehensive | 6 | 6 | 5 | 3 | 7 | 4 |
| $Q_1$Conservative | Experimenting | 6 | 3 | 10 | 7 | 4 | 8 |
| $Q_2$Group Dependent | Self sufficient | 3 | 4 | 1 | 3 | 10 | 8 |
| $Q_3$Undisciplined | Controlled | 5 | 7 | 4 | 7 | 6 | 3 |
| $Q_4$Relaxed | Tense | 6 | 4 | 7 | 3 | 7 | 8 |

# APPENDIX J

# TEACHER INTERVIEW PROTOCOLS

## Teacher Interview Protocols

### Instructions for Interviewer

The purpose of the teacher interview is to obtain information about certain teacher attitudes and expectations. In particular, it is designed to provide data concerning the teacher's perception of his (her) role as a teacher, his (her) class as a group, and individual pupils within his (her) class.

1. Since the objective of the interview is to discover what the teacher thinks and feels, it is important that the interviewer does not cue the teacher to give "acceptable" answers. The interviewer should be particularly careful to avoid asking leading questions and reacting in a judgemental way to teacher responses.

2. It is important that the teacher feel comfortable about discussing his (her) class and program. To achieve this goal it will be necessary for the interviewer to establish a relaxed, friendly and supportive atmosphere prior to and during the interview.

3. The interviewer will note that most questions have a number of sequential parts. In some cases the teacher will "take off" in response to the initial question and provide answers to subsequent parts. In other cases it will be necessary to work through each part of the question until all information has been obtained. It is important that we obtain complete answers. The interviewer must concentrate on the teacher's communication and allow himself when necessary to depart from the protocol questions for the purpose of satisfying the intent of the question.

4. The interview is to be carried out in two parts. Part I is to be conducted early in the first week of classroom observation. Part II is to be conducted during the final week of data collection, after classroom observation has been completed. Please tape each interview and label the tape according to date, Part I or II, and teacher's name. Please deliver the tape to Dave along with forms A, B, C, and D.

### PART I

The interviewer will explain that we are interested in obtaining detailed information about the class as a group and the program being offered. He will continue as follows:

> First of all I'd like to ask you a few questions about your class. I know you can't think of the class without considering particular individuals, but at this time our primary concern is to learn about the class as a group. Therefore, please try to think in terms of your assessment of the group in general.

1. Could you tell me about the class - a) what kind of ability range exists? How are they doing scholastically? How are they doing in terms of social development?
   b) How do they compare, as a group, with other classes in the school? How do they compare with classes you have had in other years?

2. Which children in the class seem to be best liked by other pupils? Which ones seem to be least liked? Can you offer any reasons for this popularity or lack of it?

I'd like to move now to a few questions about your program and the procedures you've developed for facilitating the program.

1. a) What kinds of things do you think these children should be getting out of school?

NOTE: It might be necessary to prompt the teacher at this point with questions concerning the relative importance of cognitive and affective goals, which cognitive goals are most important, which affective goals are most important.

   b) Are the children achieving these goals to your satisfaction?

NOTE: If the answer to this question is "no" or that some pupils are not achieving, follow up by asking "can you suggest reasons why not?"

2. Would you explain how the curriculum for the class is determined? What is the relative influence of such factors as Department of Education directives, school policy, your own judgement and initiative?

3. Would you tell me about the texts that are used in your class? How were they chosen? To what extent do you find it necessary to complement them with other materials? What kinds of supplementary materials are used?

4. What kinds of activities do you emphasize in the classroom in an attempt to realize the goals of your program? With these children, are there certain activities that you feel work best?

5. I'd now like to get a little information about classroom routines.

   - Do you adhere strictly to a timetable?
   - What are your policies about children talking and moving around in the classroom?
   - Do you have particular routines regarding such things as arrival to the classroom, rest periods, cleaning up, dismissal?
   - Could you tell me what kinds of things you do when the children are not doing what they are supposed to? For example, making too much noise, not paying attention, telling on one another, and fighting?

6. Researchers have found that individuals view their responsibilities as a teacher in different ways. Would you tell me what you consider to be your most important tasks as a teacher?

## PART II

**Interviewer's Introduction**

In our first interview, you told me a number of things about your class and your program. You might recall, however, that we didn't talk very much about individual children. Today I want to ask you some questions that pertain to individual children.

1. First of all I'd like to have you respond to four hypothetical questions about the children in your class. NOTE: Read these questions:

    a) If you could keep one student another year for the sheer joy of it, whom would you pick?
    b) If you could devote all your attention to a child who concerns you a great deal, whom would you pick?
    c) If a parent were to drop in unannounced for a conference, whose child would you be least prepared to talk about?
    d) If your class was to be reduced by one child, whom would you be relieved to have removed?

2. I'd like to repeat these four questions now and ask you to name two additional choices for each question. REPEAT EACH OF THE FIRST FOUR QUESTIONS.

3. Would you like to tell me your reasons for nominating these particular children?

4. I have three additional tasks I'd like you to complete relative to the children in your class. They all have to do with giving your impressions of individual children.

    a) On this sheet (PROVIDE FORM A) would you rank the children in your class according to the extent to which you think they will do well in school.

    NOTE: The instructions for ranking have been kept deliberately vague to encourage teachers to use their own subjective criteria in making judgements. Should teachers ask about critera for ranking, the interviewer will indicate that they should base ranking on their own perception of doing well in school.

    b) On this sheet (PROVIDE FORM B) would you now rate each child in accordance with your judgement as to his usual attitude to classroom activities.

c) On this sheet (PRODUCE FORM C) would you now rate each child in accordance with your judgement as to his or her academic ability?

NOTE: As teacher is completing Forms B and C, the interviewer will examine Form A and identify the three students ranked highest and the three students ranked lowest.

5. I notice that you have ranked A, B, and C as highest and X, Y, and Z as lowest in terms of how well you think they will do in school. Could you give me your reasons for these choices?

- What factors entered into your choice?
- What special characteristics do these children possess or lack?
- Do you feel that these are permanent or temporary conditions?
- How long do you feel they will continue to do well or poorly in school?

NOTE: Interviewers should, if necessary, probe beyond this point in order to establish the extent to which teachers believe characteristics identified are permanent and unchanging.

6. I'd like to ask you one final question about your program. If you had complete freedom and authority to alter the program in any direction whatever, what, if any, changes would you make?

7. Finally, I would like to obtain some basic information about your personal and professional background. Would you take a few moments and complete this form before leaving? (PROVIDE TEACHER WITH FORM D).

## FORM A

Please rank the children in your class according to the extent to which you think they will do well in school.

| | CHILDREN | RANKING |
|---|---|---|
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |
| 5. | | |
| 6. | | |
| 7. | | |
| 8. | | |
| 9. | | |
| 10. | | |
| 11. | | |
| 12. | | |
| 13. | | |
| 14. | | |
| 15. | | |
| 16. | | |
| 17. | | |
| 18. | | |
| 19. | | |
| 20. | | |
| 21. | | |
| 22. | | |
| 23. | | |
| 24. | | |
| 25. | | |
| 26. | | |
| 27. | | |
| 28. | | |
| 29. | | |
| 30. | | |

## FORM B

## ATTITUDES TOWARD CLASSROOM ACTIVITY

Please rate each child by checking the column that indicates his usual reaction to classroom activities. Please comment in any case where you feel your comments would help to give a more complete picture of the child's attitude and reaction.

| | NAME OF CHILD | Enthusiastic | Interested | Passive | Uninterested | Resistant | COMMENTS |
|---|---|---|---|---|---|---|---|
| 1. | | | | | | | |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
| 11. | | | | | | | |
| 12. | | | | | | | |
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| 16. | | | | | | | |
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| 19. | | | | | | | |
| 20. | | | | | | | |
| 21. | | | | | | | |
| 22. | | | | | | | |
| 23. | | | | | | | |
| 24. | | | | | | | |
| 25. | | | | | | | |
| 26. | | | | | | | |
| 27. | | | | | | | |
| 28. | | | | | | | |
| 29. | | | | | | | |
| 30. | | | | | | | |

## FORM C

## ACADEMIC ABILITY

Please rate each child by checking the column that best indicates the child's academic ability. Please comment in any case where you feel your comments would help to give a more complete picture of the child's academic ability.

| | NAME OF CHILD | Very Bright | Bright | Average Ability | Below Average Ability | Dull | COMMENTS |
|---|---|---|---|---|---|---|---|
| 1. | | | | | | | |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |
| 6. | | | | | | | |
| 7. | | | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
| 11. | | | | | | | |
| 12. | | | | | | | |
| 13. | | | | | | | |
| 14. | | | | | | | |
| 15. | | | | | | | |
| 16. | | | | | | | |
| 17. | | | | | | | |
| 18. | | | | | | | |
| 19. | | | | | | | |
| 20. | | | | | | | |
| 21. | | | | | | | |
| 22. | | | | | | | |
| 23. | | | | | | | |
| 24. | | | | | | | |
| 25. | | | | | | | |
| 26. | | | | | | | |
| 27. | | | | | | | |
| 28. | | | | | | | |
| 29. | | | | | | | |
| 30. | | | | | | | |

# APPENDIX K

## SUMMARY DESCRIPTIONS OF THE SIX INVESTIGATORS INVOLVED IN THE WESTHAM STUDY

# SUMMARY DESCRIPTIONS OF THE SIX INVESTIGATORS INVOLVED IN THE WESTHAM STUDY

The investigators involved in the large, combined study of which this dissertation is one part were all doctoral students working under the direction of one supervisor. The field work for this investigation was conducted in the Spring, 1976. The following table briefly summarizes the status of the six investigators at that time.

| Item | Invest.No.1 | Invest.No.2 | Invest.No.3 | Invest.No.4 | Invest.No.5 | Invest.No.6 |
|---|---|---|---|---|---|---|
| Sex | Male | Male | Male | Male | Male | Male |
| Age | 36 | 36 | 35 | 40 | 43 | 38 |
| Marital Status | Married | Married | Married | Married | Married | Married |
| Children: Sex,Age. | M(5),F(3) | F(7),M(5) | F(9),M(6) | M(6),F(3) | M(16),M(14)<br>F(11) | M(8),F(6),<br>M(4) |
| Most recent Professional Position: | Asst.Prof. | Assoc.Prof | Principal,<br>Elem.Sch. | Assoc.Prof | Asst.Prof | Vice-Prin.<br>Jr.Secd.Sch. |
| Other Professional Positions | Sch.Teach.<br>Univ.Teach.<br>Pract.Super. | Sch.Teach.<br>Vice-Prin.<br>Pract.Super. | Sch.Teach.<br>Vice-Prin.<br>Pract.Super.<br>Teacher's Pro. development organiser.<br>Uni.Lecturer | Sch.Teach.<br>Principal<br>Col.Lecturer<br>Pract.Super. | Sch.Teach.<br>Sch.Dept.Head<br>Col.Teach.<br>Pract.Super.<br>Uni.Dept.Chair.<br>Youth Camp Dir. | Sch.Teacher<br>Sch.Counsellor<br>Pract.Super.<br>Youth Camp Dir.<br>Uni.Lecturer |
| Degrees and Prof. Diplomas | B.A./B.Sc.<br>B.Ed.<br>M.A. | B.A./B.Ed.<br>M.Ed. | B.Sc.<br>B.Ed.<br>M.Ed. | B.A.<br>M.Ed. | B.Ed.<br>M.Sc. | B.A.<br>M.A. |
| Research Qual. obtained for Westham Study | CASES coder<br>Shadow Study observer<br>Pupil Inter. | CASES coder<br>Shadow Study observer<br>Pupil Inter. | DICOS coder<br>HIRS coder<br>Teach.Inter. | DICOS coder<br>HIRS coder<br>Teach.Inter. | CASES coder<br>Shadow Study observer<br>Pupil Inter. | DICOS coder<br>HIRS coder<br>Teach.Inter. |
| Other relevant Reseach Experience | Designed class observation system.<br>Trained Ob. system coders | Member,Teach. Observation Evaluation Team | | Trained coder for Flanders Inter.Analysis System.<br>Co-research class observ. study. | Co-ordin.for exper/devel. program in open area team teach. | M.A.Thesis: Anal.Teaching.<br>Lecturer, System Analysis Teach. (Hi & Low infer. systems) |
| Places and/or Institutions where experience gained. | P.E.I<br>Nova Scotia<br>Alberta<br>Secd.School<br>University | Nova Scotia<br>Alberta<br>Secd.School<br>University | Manitoba<br>Alberta<br>Elementary & Secd. schools<br>University | Australia<br>Elem. and Secd. sch.<br>College | England<br>Manitoba<br>B. C.<br>Wash.State<br>Ore. State<br>Elem. and Jr.Secd.Sch.<br>College<br>University | B. C.<br>Junior and Sen.Secd. Schools.<br>University |